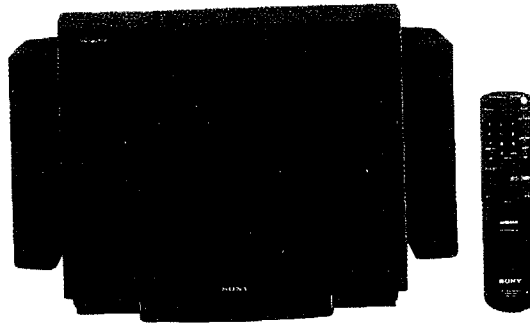


# KV-27XBR96S / 32XBR96S

RM-Y114A

## SERVICE MANUAL



### US Model

KV-27XBR96S

Chassis No. SCC-F16M-A

KV-32XBR96S

Chassis No. SCC-F16N-A

### Canadian Model

KV-27XBR96S

Chassis No. SCC-F17M-A

KV-32XBR96S

Chassis No. SCC-F17N-A

## FN CHASSIS



996495101

### MODELS OF THE SAME SERIES

KV-27XBR96S/32XBR96S	KV-27XBR95S/32XBR95S
KV-27XBR25/32XBR25	KV-32XBR90S
KV-27XBR35/32XBR35	KV-32XBR91S

### SPECIFICATIONS

Television system American TV standards  
Channel coverage VHF: 2-13  
UHF: 14-69  
CABLE TV: 1-125  
Picture tube Microblack™ Trinitron® tube  
27-inch picture measured diagonally  
29-inch picture tube measured diagonally  
(KV-27XBR96S)  
32-inch picture measured diagonally  
34-inch picture tube measured diagonally  
(KV-32XBR96S)  
Antenna 75 ohm external antenna  
terminal for VHF/UHF  
Input jacks VIDEO IN 1, 2 and 3  
S VIDEO IN (4-pin mini DIN)  
Y: 1 Vp-p, 75-ohms unbalanced,  
sync negative  
C: 0.286 Vp-p (Burst signal)  
75-ohms  
Video (phono jacks): 1 Vp-p, 75-ohms  
unbalanced, sync negative  
Audio (phono jacks):  
500 mVrms (100% modulation)  
Impedance: 47 kilo-ohms  
SIRCS (mini jack) 5 Vp-p

### Output jacks

### MONITOR OUT

#### S VIDEO MONITOR OUT

(4-pin mini DIN)

Y: 1 Vp-p, 75-ohms

unbalanced, sync negative

Video (phono jacks): 1 Vp-p, 75-ohms

unbalanced, sync negative

Audio (phono jacks): 500 mVrms

(100% modulation)

Impedance: 10 kilo-ohms

SIRCS (mini jack) 5 Vp-p

#### AUDIO OUT (VARIABLE)

(phono jacks)

More than 900 mVrms (100%

modulation) at the maximum volume

setting (variable)

Impedance: 5 kilo-ohms

#### AUDIO OUT

(phono jacks)

900 mVrms (100% modulation)

Impedance: 5 kilo-ohms

- Continued on next page -



TRINITRON® COLOR TV  
**SONY®**

Speaker output	FRONT : 13W×2 (8 ohms) REAR : 6.5W×2 (8 ohms)	Weight	(KV-27XBR96S) w/speakers : 62.6 kg (138 lb 1/8 oz) w/o speakers : 52 kg (114 lb 11 oz)
Speaker size	Tweeter 57 mm (2 1/4 in.)× 2 units (FRONT) Tweeter 57 mm (2 1/4 in.)× 2 units (SIDE) Woofer 130 mm (5 1/8 in.)× 2 units		(KV-32XBR96S) w/speakers : 86.2 kg (190 lb 1 oz) w/o speakers : 75.6 kg (166 lb 11 oz) Speaker (1) : 5 kg (11 lb 1 oz)
Audio frequency response	Tweeter 250Hz-20kHz Woofer 40Hz-250Hz	Supplied accessories	Remote Commander RM-Y114A (1) with 2 size AA (R6) EVEREADY batteries
Power requirements	120 V AC, 60 Hz		Detachable speaker parts
Power consumption	270W		— Speaker boxes (L/R)
Dimensions (w/h/d)	(KV-27XBR96S) w/speakers : 894×560×532 mm (35 1/4×22 1/8×21 inches) w/o speakers : 684×560×532 mm (26 7/8×22 1/8×21 inches) (KV-32XBR96S) w/speakers : 1000×663.5×586 mm (39 3/8×26 1/8×23 1/8 inches) w/o speakers : 794×663.5×586 mm (31 3/8×26 1/8×23 1/8 inches) Speaker (1) : 100×480×305 mm (4×19×12 1/8 inches)	Optional accessories	U/V mixer EAC-66 Connecting cable RK-74A VMC-810S/820S YC-15V/30V

Design and specifications are subject to change without notice.

**(CAUTION)**

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

**WARNING!!**

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.

THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

**SAFETY-RELATED COMPONENT WARNING !!**

COMPONENTS IDENTIFIED BY SHADING AND MARK  $\Delta$  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

**(ATTENTION)**

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

**ATTENTION!!**

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISE LORS DE TOUT DÉPANNAGE.

LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDE A L'ALIMENTATION SECTEUR.

**ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!**

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MAPQUE  $\Delta$  SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES CONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUE DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES REGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIÉS DANS LE PRÉSENT MANUEL. SUIVRE CES PROCEDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

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## SAFETY CHECK-OUT

( US model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer :

- 1 Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
- 2 Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
- 3 Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
- 4 Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
- 5 Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
- 6 Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
- 7 Check the condition of the monopole antenna (if any). Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
- 8 Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
- 9 Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

### HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line; the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

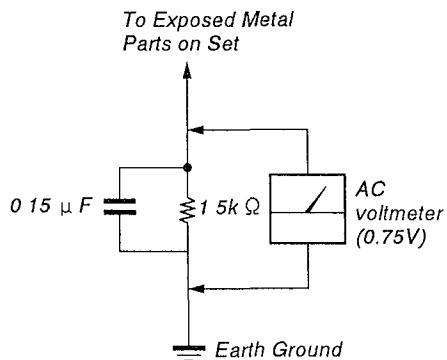


Fig. A Using an AC voltmeter to check AC leakage.

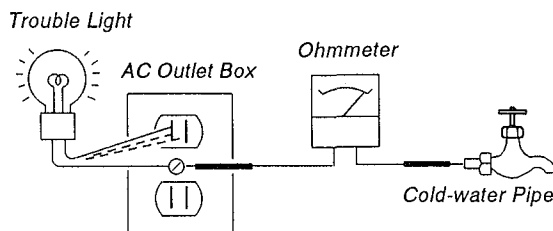


Fig. B. Checking for earth ground.

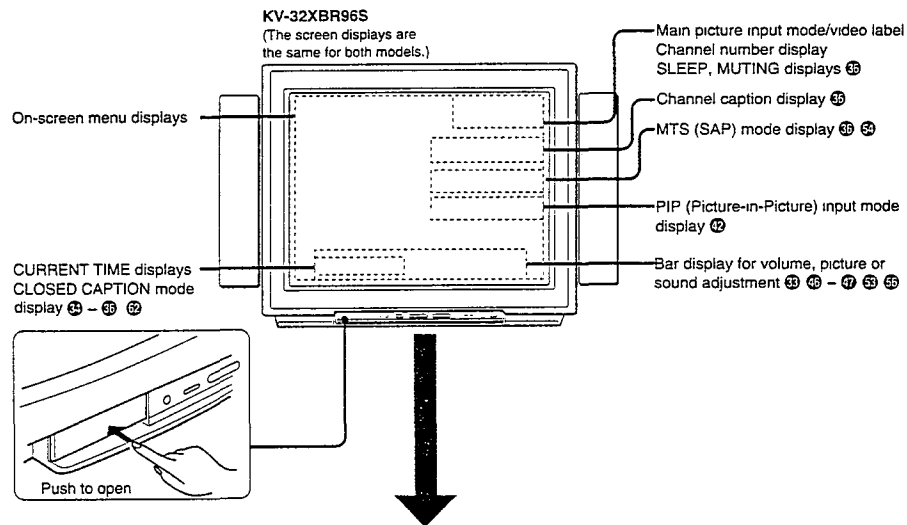
## SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

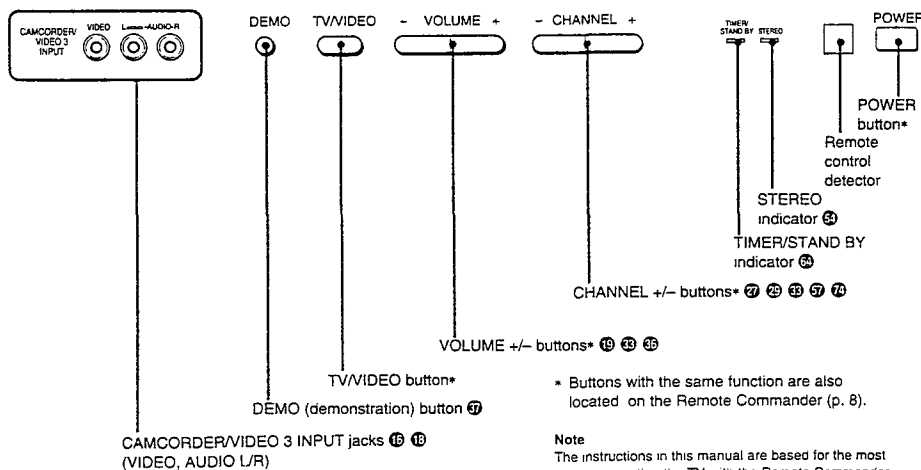
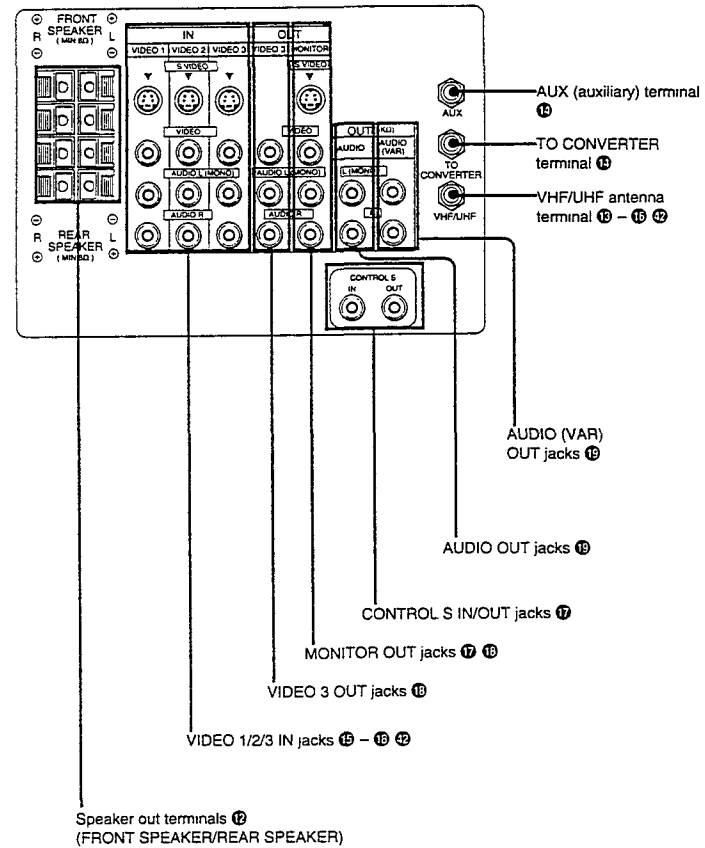
### Locating Controls and Connectors

For details, see the pages indicated by the numbered black circles ●.

Front

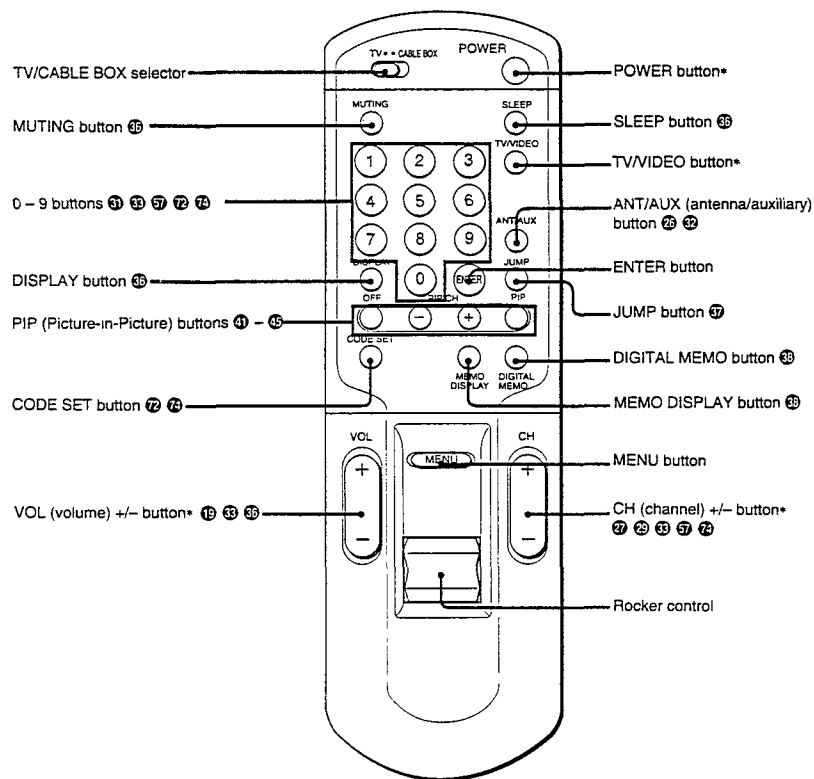


Rear

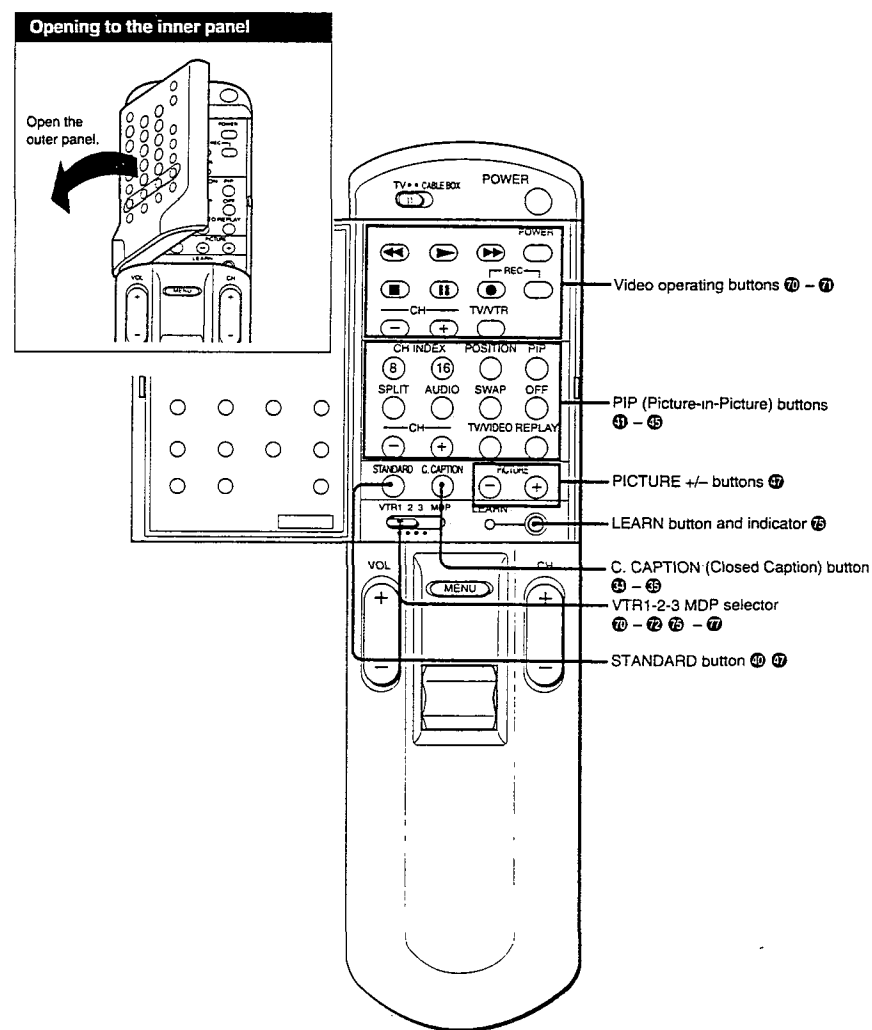


## Locating Controls and Connectors

### Remote Commander RM-Y114A (Outer panel controls)



### Remote Commander (Inner panel controls)



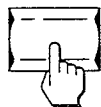
### Using the rocker control

Use the rocker control to make on-screen menu selections (see p. 22).

Press the control up or down to make a selection.



Click the control to execute the selection.



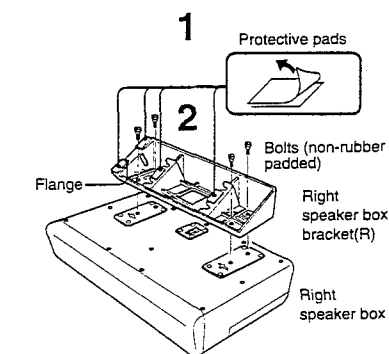
\* Buttons with the same function are also located on the TV (p. 6).

#### Note

If the TV/CABLE BOX selector is set to CABLE BOX, the Remote Commander is able to control a connected cable box, not the TV (p. 74). Set the selector to TV to control the TV with the Remote Commander.

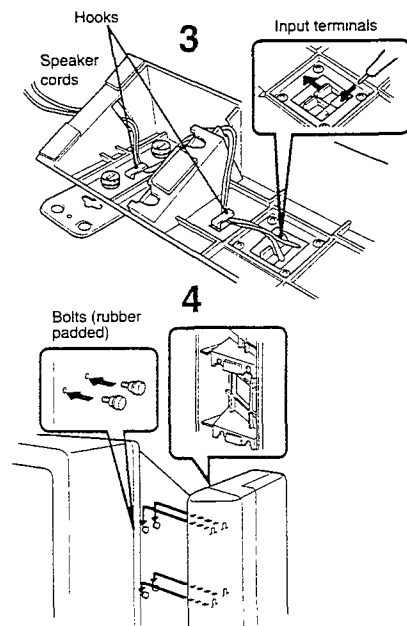
## Installing the Detachable Speakers

Follow these instructions to assemble and install the detachable speakers (left and right sides) to the TV. Other installation examples appear on the next page. After installing the speakers, make sure **SPEAKER** is set to "ON" (p. 55).



**1** To install the right speaker box, remove the backing from four protective pads, and attach the pads to the right speaker box bracket (R) as shown.

**2** Place the right speaker box bracket on the right speaker box as shown, with the bracket flange on the bottom, and the four holes aligned; then insert and tighten the four bolts (non-rubber padded).



**3** Attach the speaker cords to the input terminals on the speaker box, matching the cord and terminal colors. Then insert the cords under the hooks.

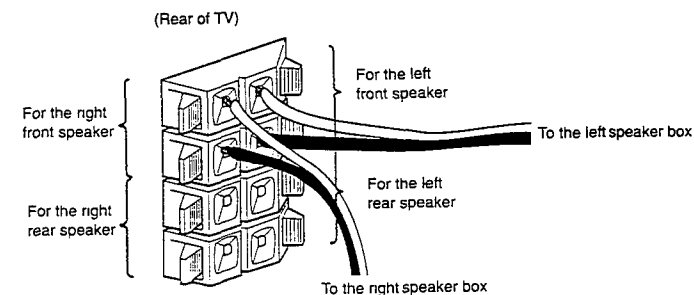
**4** Attach the supplied bolts (rubber padded), then install the speaker box to the right side of the TV.

**5** Repeat steps 1 – 4 to assemble and install the left speaker box; then follow the instructions on the next page to connect the speaker cords to the TV.

**Note**  
The speaker grill cover are not removal.

## Installing the Detachable Speakers

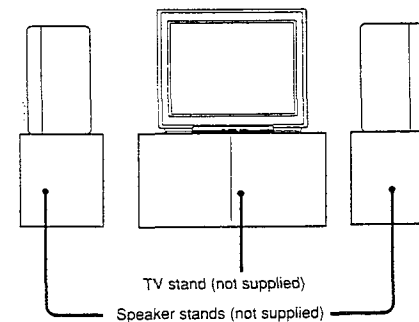
### Connecting the speaker cords to the TV



**Caution**  
Always match the speaker cord and terminal colors when making the connection.

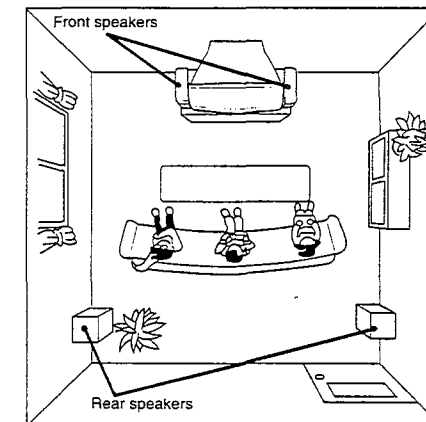
### Using the speakers detached from the TV

You can place the speakers on speaker stands (not supplied) rather than attaching them to the TV. Be sure to position the speaker boxes as shown.



### Connecting optional speakers

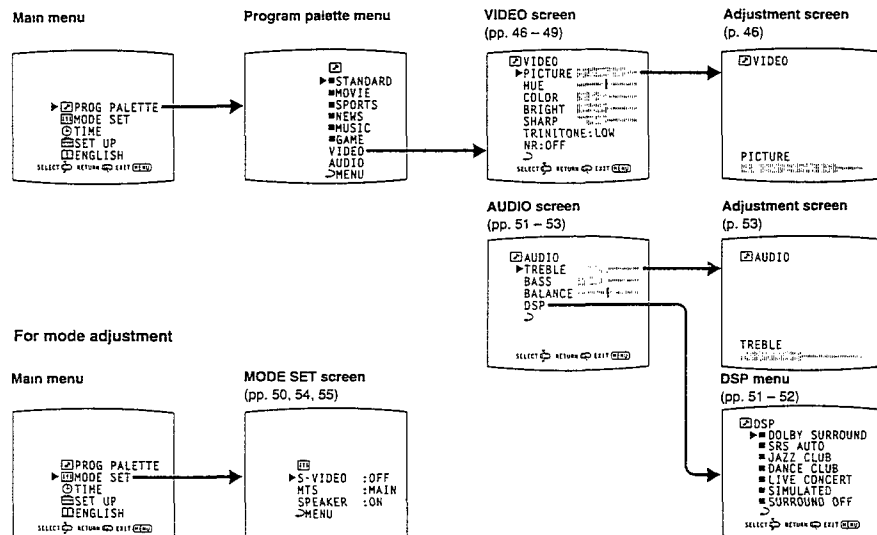
You can connect optional speakers mounted to a rear wall to create a surround effect. After connecting the rear speakers, set **REAR SPEAKER** to "YES" (p. 56).



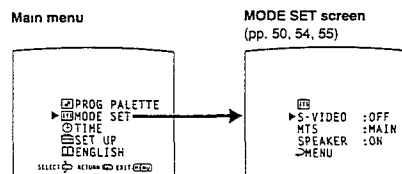
# Using the On-Screen Menus

The following flow chart shows the different levels of on-screen menus that you can use to make various adjustments and settings. See the indicated pages for instructions on using each feature.

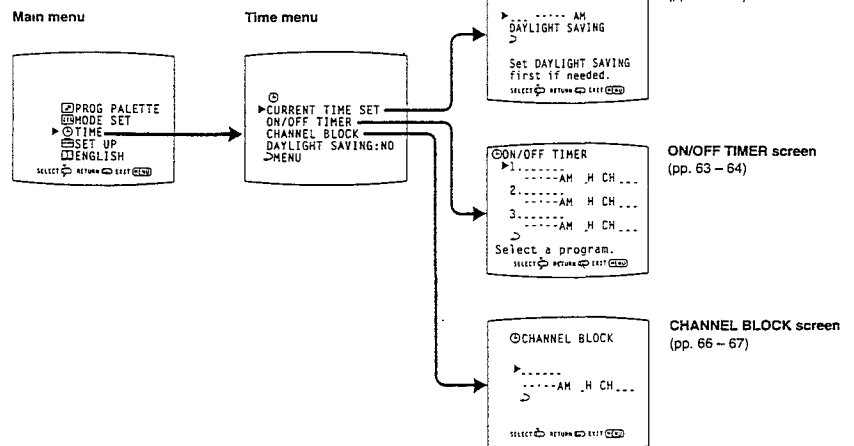
## For picture and sound quality adjustment



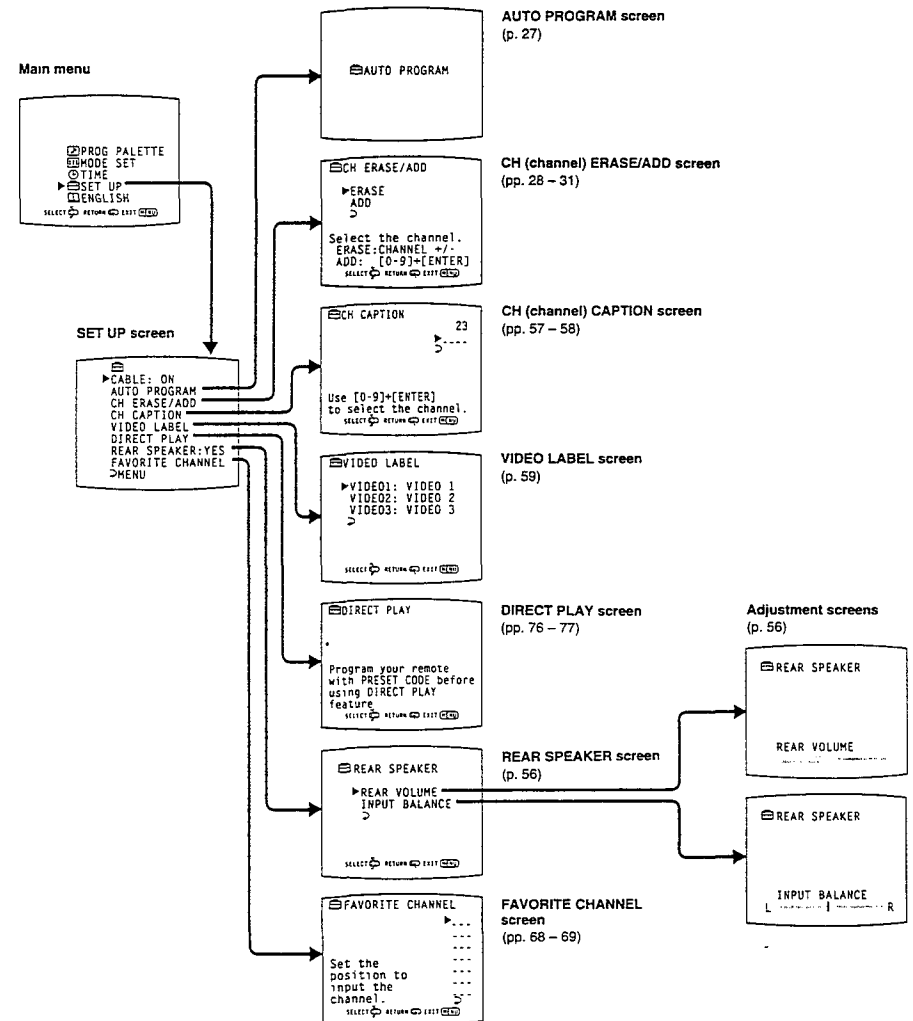
## For mode adjustment



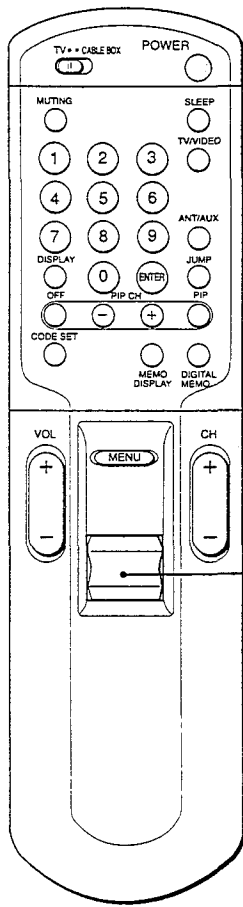
## For time-related settings



## For presetting and other functions



# Using the On-Screen Menus



Rocker control

## Navigating through the menus

**To display the main menu**  
Press MENU.

**To return to the previous menu**  
Press the rocker control up or down until the cursor points to "➤ MENU." Then click the rocker control.

**To return to the main menu**  
Repeat the above, until you reach the main menu.

**To return to the normal screen**  
Press MENU on the Remote Commander.

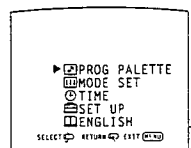
## Changing the menu language.

The menu language is factory-set to ENGLISH. Follow these instructions to change the menu language to Spanish or French, or back to English.

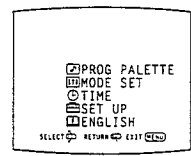
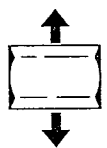
**1** Press POWER to turn on the TV.  
*The TIMER/STAND BY indicator flashes until the picture appears.*



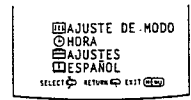
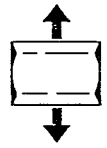
**2** Press MENU.  
*The main menu appears.*



**3** Press the rocker control up or down until the cursor points to "ENGLISH." Then click the rocker control.  
*The language display turns red.*

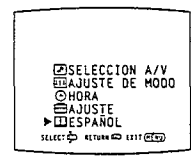


**4** Press the rocker control up or down to select the language.  
*Each time you press the rocker control up or down, the "ESPAÑOL," "FRANÇAIS" and "ENGLISH" menus appear.*



**Note**  
Certain parts of the "ESPAÑOL" and "FRANÇAIS" menus remain in English.

**5** Click the rocker control.  
*The language is selected.*

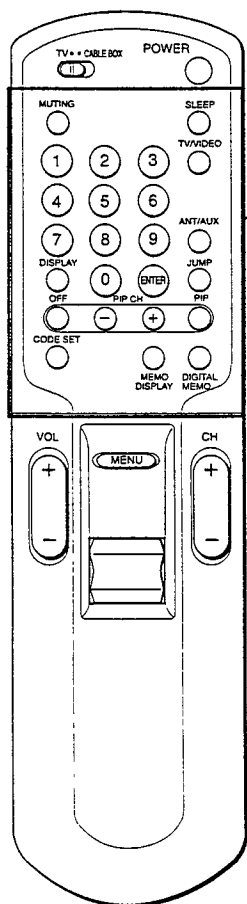


Spanish menu

**To return to the normal screen.**  
Press MENU on the Remote Commander.

- Notes concerning menus**
- During PIP (Picture-in-Picture) mode, the on-screen menus may overlap the window picture.
  - The menus disappear automatically, if you do not press a button within 90 seconds.

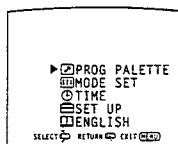
# Setting CABLE ON or OFF



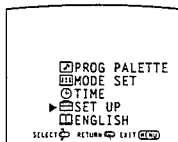
If you have cable connected to the TV, follow the steps below to set the cable connection on or off. Set CABLE OFF to preset or watch VHF or UHF channels, and set CABLE ON to preset or watch cable TV channels.

**Note**  
If the TV is in video mode, the "CABLE" display is shaded and cannot be selected. Press TV/VIDEO to change to TV mode.

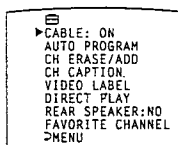
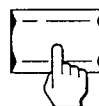
- 1 Press MENU.  
The main menu appears.



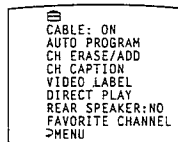
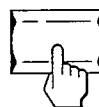
- 2 Press the rocker control up or down until the cursor points to "SET UP "



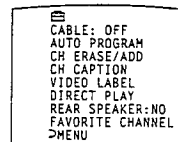
- 3 Click the rocker control.  
The set up menu appears, and the cursor points to "CABLE."



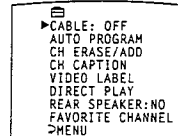
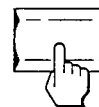
- 4 Click the rocker control again.  
The mode display turns red.



- 5 Press the rocker control up or down to select "ON" or "OFF "



- 6 Click the rocker control.  
The setting is complete.



**To return to the previous menu**

Press the rocker control up or down until the cursor points to " > MENU." Then click the rocker control.

**To return to the main menu**

Repeat the above, until you reach the main menu.

**To return to the normal screen.**

Press MENU on the Remote Commander.

## Cable TV channel chart\*

Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to the chart below.

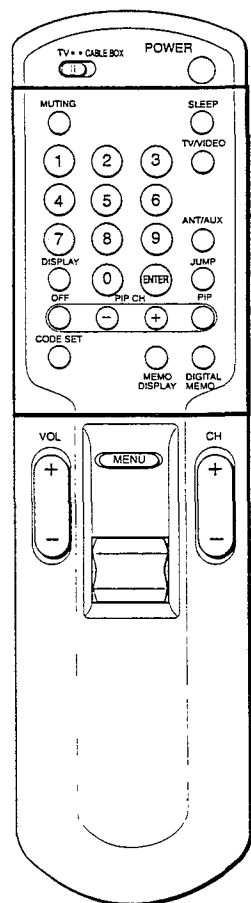
Number on this TV	Corresponding CATV channel
1	A-8
5	A-7
6	A-6
14	A
15	B
16	C
17	D
18	E
19	F
20	G
21	H
22	I
23	J
24	K
25	L
26	M
27	N
28	O
29	P
30	Q
31	R
32	S
33	T
34	U
35	V
36	W
37	W+1
38	W+2
39	W+3
•	•
•	•
•	•
93	W+57
94	W+58
95	A-5
96	A-4
97	A-3
98	A-2
99	A-1
100	W+59
101	W+60
102	W+61
•	•
•	•
•	•
123	W+82
124	W+83
125	W+84

Check with your local cable TV company for more complete information on the available channels.

\* The designation of the cable TV channels conforms to the EIA/NCTA recommendation.

# Presetting TV Channels

By presetting TV channels to the TV, you can select channels by pressing CH (CHANNEL) +/- (You can select VHF channels 2 – 13 without presetting.)



## Presetting all receivable channels automatically

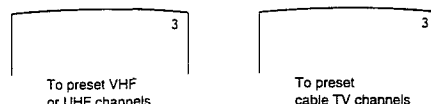
Follow these instructions to preset all the receivable VHF, UHF or cable TV channels to the TV.

### Notes

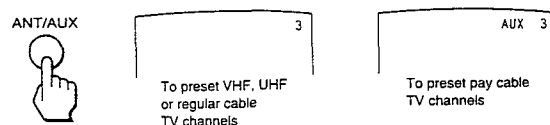
- If the TV is in video mode, the "AUTO PROGRAM" display is shaded and cannot be selected. Press TV/VIDEO to change to TV mode.
- Perform auto programming during the day rather than late at night, when some channels may not be broadcasting.

Outer panel

- Set the cable connection on or off (pp. 24 – 25) to select the type of channel you want to preset, VHF/UHF or cable TV.



Press ANT/AUX to select the type of channel you want to preset, VHF/UHF/regular cable TV, or pay cable TV connected to the AUX (auxiliary) terminal.



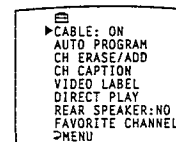
- Press MENU. The main menu appears.



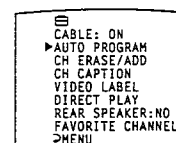
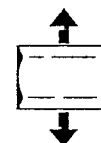
- Press the rocker control up or down until the cursor points to "SET UP"



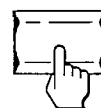
- Click the rocker control. The set up menu appears.



- Press the rocker control up or down until the cursor points to "AUTO PROGRAM."

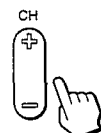


- Click the rocker control.



"AUTO PROGRAM" appears on the screen and receivable channels (other than the channels already preset) are preset in numerical sequence. The channels previously preset will not remain in the TV's memory. When no more channels are found, auto programming stops and the screen returns automatically to the set up menu.

- Press CH +/- to check or view the preset channels.



## Receivable channels for this TV

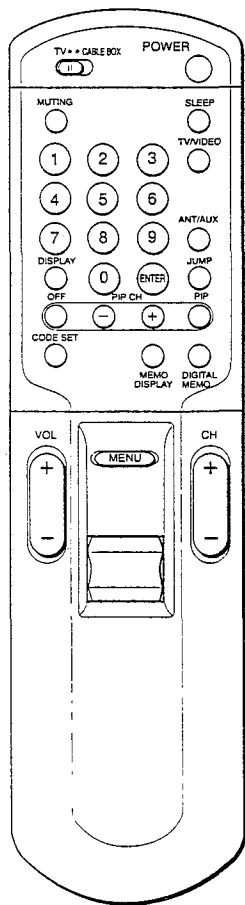
VHF: 2 – 13  
UHF: 14 – 69  
Cable: 1 – 125

To select TV channels without presetting  
Press the 0 – 9 buttons and ENTER.

To return to the previous menu  
Press the rocker control up or down until the cursor points to "➤ MENU." Then click the rocker control.

To return to the main menu  
Repeat the above, until you reach the main menu.

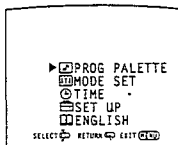
To return to the normal screen.  
Press MENU on the Remote Commander.



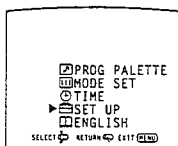
## Erasing TV channels

Follow these instructions to erase unnecessary TV channels, so that when you press CH +/-, the channel(s) are skipped.

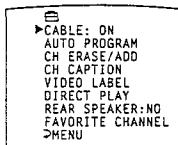
- 1 Press MENU.  
The main menu appears.



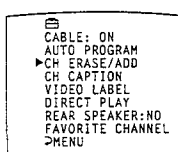
- 2 Press the rocker control up or down until the cursor points to "SET UP "



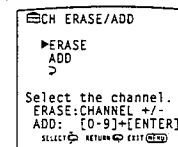
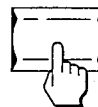
- 3 Click the rocker control.  
The set up menu appears.



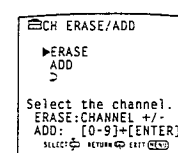
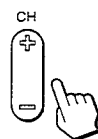
- 4 Press the rocker control up or down until the cursor points to "CH ERASE/ADD."



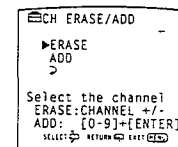
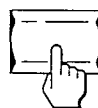
- 5 Click the rocker control.  
The CH ERASE/ADD screen appears, and the cursor points to "ERASE."



- 6 Press CH +/- to select the channel you want to erase.  
The channel display appears.



- 7 Click the rocker control.  
A "-" sign appears in front of the channel number display, indicating that the channel is erased; then the CH ERASE/ADD screen automatically reappears.



To erase another channel  
Repeat steps 6 – 7.

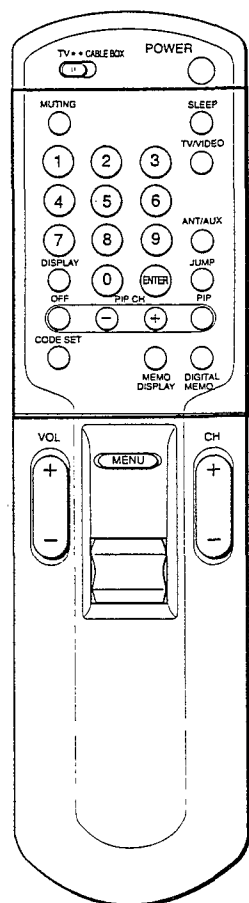
To return to the previous menu  
Press the rocker control up or down until the cursor points to " > MENU." Then click the rocker control.

To return to the main menu  
Repeat the above, until you reach the main menu.

To return to the normal screen  
Press MENU on the Remote Commander.

**Note**  
If you erase a VHF or UHF channel, the same number cable TV channel is also erased (and vice versa).

## Presetting TV Channels



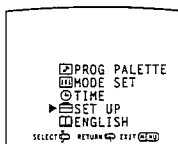
### Adding TV channels

Follow these instructions to add TV channels one by one to the selection memory, or to replace a TV channel you previously erased (pp. 28 – 29).

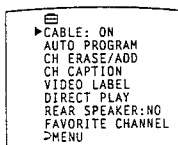
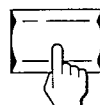
- 1 Press MENU.  
The main menu appears.



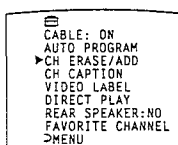
- 2 Press the rocker control up or down until the cursor points to "SET UP."



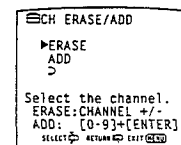
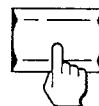
- 3 Click the rocker control.  
The set up menu appears.



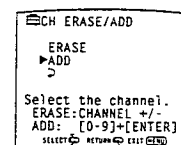
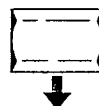
- 4 Press the rocker control up or down until the cursor points to "CH ERASE/ADD."



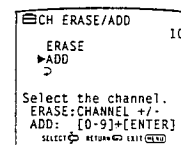
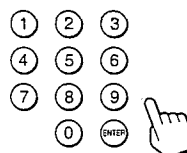
- 5 Click the rocker control.  
The CH ERASE/ADD screen appears.



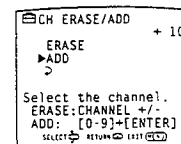
- 6 Press the rocker control down until the cursor points to "ADD."



- 7 Press 0 – 9 and ENTER on the Remote Commander to select the channel you want to add.  
The channel display appears.



- 8 Click the rocker control.  
A "+" sign appears in front of the channel number display, indicating that the channel is added; then the CH ERASE/ADD screen automatically reappears.



To add another channel  
Repeat steps 7 – 8.

To return to the previous menu  
Press the rocker control up or down until the cursor points to "➤ MENU." Then click the rocker control.

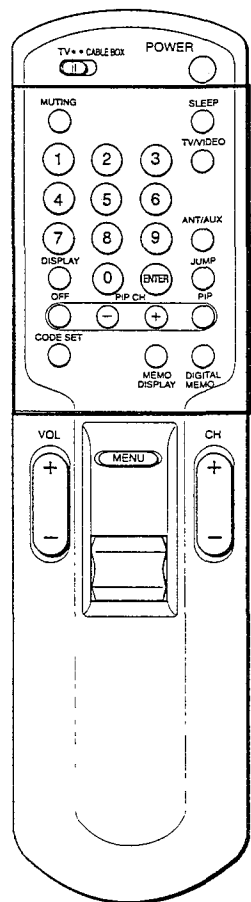
To return to the main menu  
Repeat the above, until you reach the main menu.

To return to the normal screen  
Press MENU on the Remote Commander.

**Note**  
If you add a VHF or UHF channel, the same number cable TV channel is also added (and vice versa).

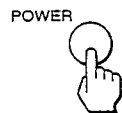
## Chapter 2: Using Basic Features

# Watching TV Programs

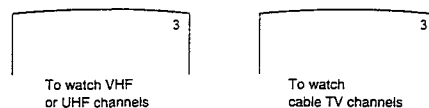


Make sure that the TV/CABLE BOX selector on the Remote Commander is set to TV, in order to control the TV with the Remote Commander.

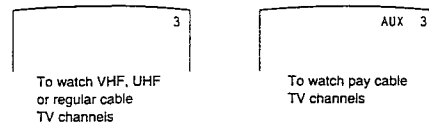
- 1 Press POWER to turn on the TV.  
The **TIMER/STAND BY** indicator flashes until the picture appears.



- 2 Set the cable connection on or off (pp. 24 – 25) to select the type of channel you want to watch, VHF/UHF or cable TV.



Press **ANT/AUX** to select the type of channel you want to watch, VHF/UHF/regular cable TV, or pay cable TV connected to the AUX (auxiliary) terminal.

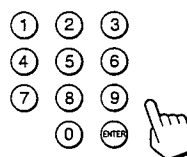


- 3 Select a channel in one of the following two ways:

To scan the preset channels in numerical sequence, press **CH +/-**



To select a channel directly, press 0 – 9 and then **ENTER**.  
For example, to select channel 10, press 1, 0 and **ENTER**.



- 4 Press **VOL +/-** to adjust the volume.



Press **+** to increase the volume.  
Press **-** to decrease the volume.

If **VIDEO 1**, **VIDEO 2** or **VIDEO 3** appears on the screen

Press **TV/VIDEO** until a TV channel number appears.

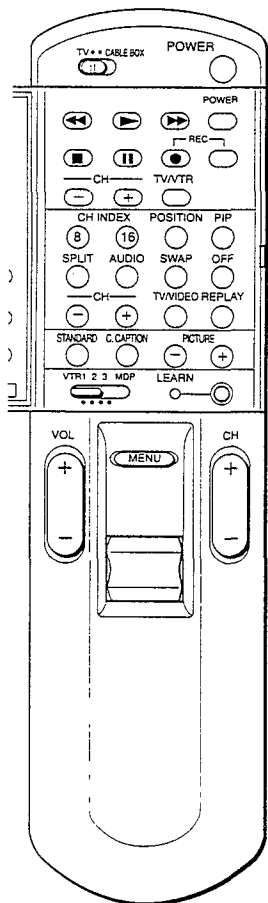
To select channels more easily

Set **FAVORITE CHANNEL** (pp. 70 – 71).

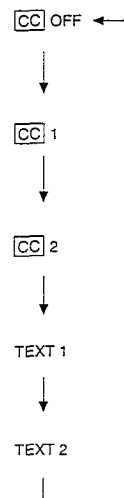
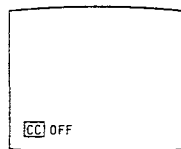
To turn off the TV

Press **POWER**.

# Using Closed Caption



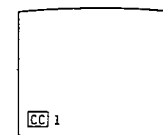
- 1 Press C.CAPTION.  
The closed caption mode appears. CC1, CC2, TEXT1, TEXT2 or CC OFF appears in sequence each time you press C.CAPTION.



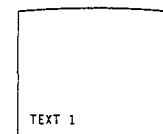
- 2 Press C.CAPTION repeatedly.



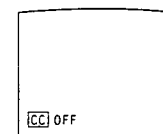
Select CC1 or CC2 to view Captions.  
A Caption is a printed version of the dialogue or sound effects of a program. (The mode should be set to CC1 for most programs.)



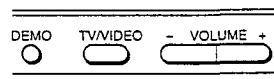
Select TEXT1 or TEXT2 to view Text.  
Text is information that is presented using the half to full television screen. It is usually not related to the program.



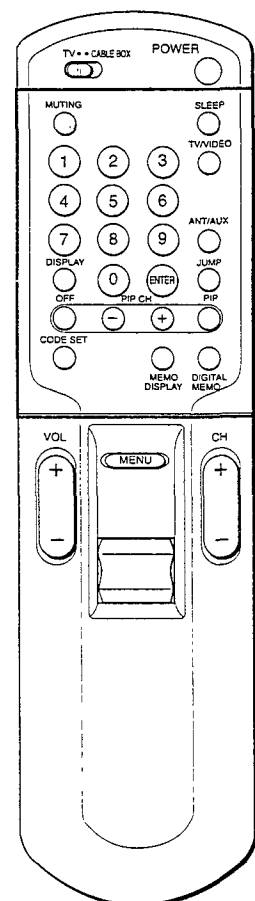
Select CC OFF if you don't want to view Closed Caption nor Text.



# Using Convenient Features



Front of TV



Outer panel

## Muting the sound — MUTING

Press MUTING.  
"MUTING" appears on the screen.

To restore the sound  
Press MUTING again, or press VOL +.

MUTING



## Keeping the displays on-screen — DISPLAY

Press DISPLAY.  
All the existing displays appear: channel number, channel caption (if set), MTS mode ("SAP" only), window picture input mode, and the current time ("AM" or "PM" disappears after about three seconds).

DISPLAY



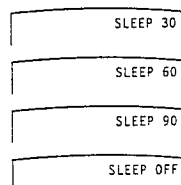
To turn off the displays  
Press DISPLAY again.

## Setting the sleep timer — SLEEP

The sleep timer turns off the TV automatically after the amount of time you select.

Press SLEEP.  
Each time you press SLEEP, the time increments "30," "60," "90" and "OFF" mode appear in sequence.

SLEEP



A red "SLEEP" display appears about one minute before the TV goes off.

To cancel the setting.  
Press SLEEP until OFF mode appears.  
A green "SLEEP OFF" display appears for about three seconds.

OR  
Turn the TV off.  
The sleep timer setting is cancelled.

## Switching quickly between two channels — JUMP

Use this function to keep track of two programs alternately.

To recall the channel you were watching previously  
Press JUMP

JUMP



To switch back to the first channel!  
Press JUMP again.

Note  
The JUMP function also changes the mode to ANT (antenna) or AUX (auxiliary), depending on the mode of the channel you were watching previously.

## Previewing the features — DEMO

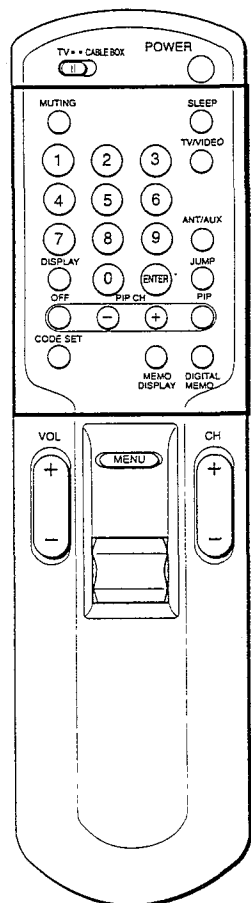
Press DEMO.  
Functions and menus are displayed one by one.

To restart DEMO from the beginning  
Press DEMO again.

To stop DEMO  
Press any button.

DEMO





## Storing an image in memory – DIGITAL MEMO

Use this feature to store and recall a recipe from a cooking program, a displayed address or phone number and so on.

- 1 Press DIGITAL MEMO.  
*The displayed image is stored in memory, and the image remains still on the screen.*



- 2 Press MEMO DISPLAY.  
*The TV returns to normal viewing mode.*



**To recall the stored image**

Press MEMO DISPLAY.



The stored picture is retained in memory until:

- you turn off the TV.
- you press OFF (in the PIP section) twice.
- you store a different image.

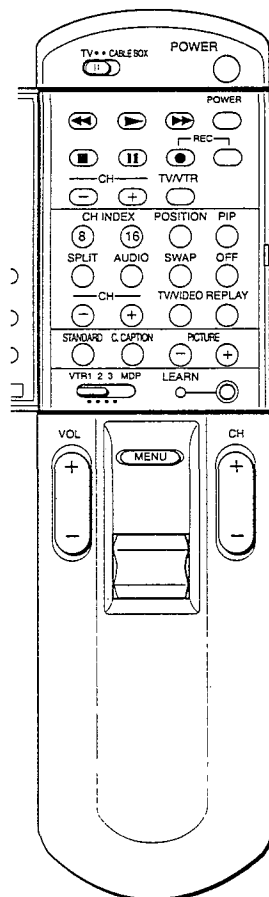
**To return to the normal screen**  
Press MEMO DISPLAY again.

**Note**  
You cannot display a window picture (pp. 41 – 45) while viewing a DIGITAL MEMO screen.

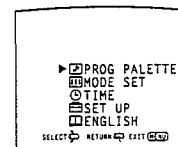
## Selecting a Picture and Sound Mode

This TV features six modes (STANDARD, MOVIE, SPORTS, NEWS, MUSIC, GAME) that offer different picture and sound qualities. Choose the one that best suits the type of program that you want to watch.

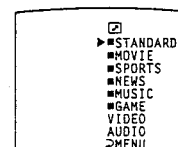
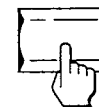
**Example:** Select MOVIE mode for picture and sound that gives you the sense of being in a movie theater.



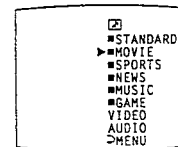
- 1 Press MENU.  
*The main menu appears, and the cursor points to "PROG PALETTE."*



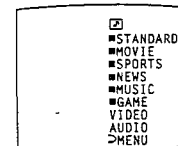
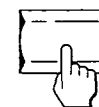
- 2 Click the rocker control.  
*The program palette menu appears.*



- 3 Press the rocker control up or down until the cursor points to "MOVIE."



- 4 Click the rocker control.  
*The "MOVIE" display turns green, indicating that MOVIE mode is selected.*



**To select a different mode**  
Repeat steps 3 – 4.

## Selecting a Picture and Sound Mode

### Selecting standard mode (without using the menus)

Follow these instructions to select standard mode without using the on-screen menus.

Press STANDARD.

STANDARD



#### When you select STANDARD mode

You receive standard picture and sound quality. Any video or audio adjustments you made ("Adjusting the Picture" pp. 46 – 50; "Adjusting the Sound" pp. 51 – 56) are cancelled and the original factory settings are restored.

#### When you select MOVIE mode

You receive a finely detailed picture, and a theatrical audio effect. To further adjust picture and sound qualities, follow the instructions on pp. 46 – 50 and pp. 51 – 56, or select different sound modes from the DSP (Digital Sound Processor) menu (pp. 51 – 52).

#### When you select SPORTS mode

You receive a vivid, bright picture, and sound with a sports stadium effect. To further adjust picture and sound qualities, follow the instructions on pp. 46 – 50 and pp. 51 – 56, or select different sound modes from the DSP (Digital Sound Processor) menu (pp. 51 – 52).

#### When you select NEWS mode

Picture noise is reduced, and you receive clear voice reproduction. To further adjust picture and sound qualities, follow the instructions on pp. 46 – 50 and pp. 51 – 56, or select different sound modes from the DSP (Digital Sound Processor) menu (pp. 51 – 52).

#### When you select MUSIC mode

You receive a warmer picture, and live concert effect sound. To further adjust picture and sound qualities, follow the instructions on pp. 46 – 50 and pp. 51 – 56, or select different sound modes from the DSP (Digital Sound Processor) menu (pp. 51 – 52).

#### When you select GAME mode

The picture is easier on your eyes, and sound has a surround effect. To further adjust picture and sound qualities, follow the instructions on pp. 46 – 50 and pp. 51 – 56, or select different sound modes from the DSP (Digital Sound Processor) menu (pp. 51 – 52).

**To return to the previous menu**  
Press the rocker control up or down until the cursor points to "➤ MENU." Then click the rocker control.

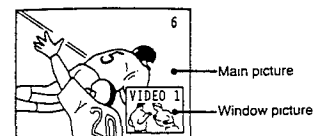
**To return to the main menu**  
Repeat the above, until you reach the main menu.

**To return to the normal screen.**  
Press MENU on the Remote Commander.

## Chapter 3: Using Advanced Features

# Watching Two or More Pictures at Once (PIP)

You can watch both the main picture and one or more window pictures simultaneously, using the Picture-in-Picture (PIP) function.



### Picture-in-Picture special features

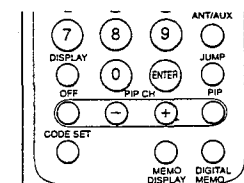
When watching the main picture and a window picture, you can:

- Choose the sound from the main or window picture (AUDIO).
- Change the position of the window picture (POSITION).
- Swap the main and window pictures (SWAP).
- Replay the main picture as a window picture (REPLAY).
- Split the screen, with the main picture on one side and the window picture on the other side (SPLIT).
- Display 8 or 16 TV channels simultaneously (CH INDEX 8/16).

### Displaying a window picture

To turn PIP mode on or off, or to change TV channels, you can use the PIP buttons on the Remote Commander's outer panel. For other PIP functions, use the inner panel controls, which also include the PIP, OFF and CH +/- buttons.

Remote Commander (Outer panel)



Press PIP to display a window picture



Input source mode or TV channel for the main picture



Input source mode or TV channel for the window picture



### Notes

- You can also use the CH +/- buttons on the Remote Commander's inner panel.
- The video label and channel caption will not appear with the window picture even if you have set them.
- If you select a blocked channel in the window picture, the display "BLOCKED" appears with the window picture. (See "Setting CHANNEL BLOCK," pp. 66 – 67.)
- If you display a DIGITAL MEMO screen (p. 38), the window picture disappears.

A window picture appears in the last mode you watched. Each time you press PIP, a 1/4 or 1/9 size window picture appears alternately.

#### To turn PIP function off

Press OFF

The window picture disappears.

#### To change TV channels in the window picture

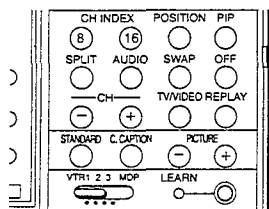
Press TV/VIDEO to select TV mode; then press CH +/- in the PIP control area.

## Watching Two Pictures at Once (PIP)

### Changing the window picture input mode

Follow these instructions to select the input mode (TV/VIDEO 1, VIDEO 2, VIDEO 3) for the window picture.

Remote Commander (Inner panel)




- 1 Press PIP to display a window picture.



- 2 Press TV/VIDEO to select the input mode. Each time you press TV/VIDEO, "TV," "VIDEO 1," "VIDEO 2" and "VIDEO 3" appear in sequence.



To receive the window picture sound  
Press AUDIO.

The  display appears for a few seconds, indicating that the window picture sound is being received.

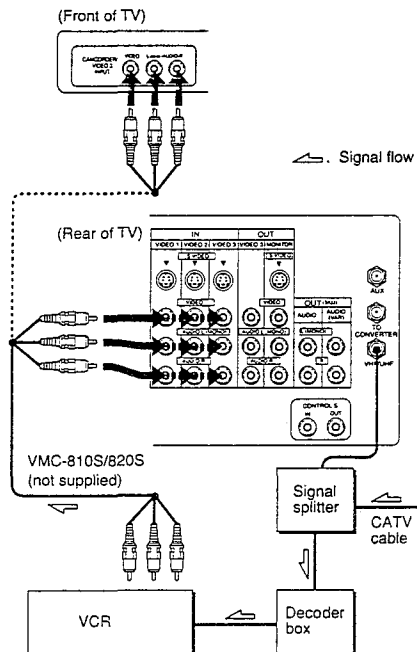
To restore the main picture sound  
Press AUDIO again.

#### Note

The window picture sound is also output from the AUDIO (VAR) OUT jacks. The AUDIO OUT and MONITOR OUT jacks output the main picture sound only.

### Displaying CATV input as a window picture

To use Picture-in-Picture with pay cable TV input, make the connections to your cable converter box as shown below.



After making the above connections, turn the cable connection on by following the steps on pp. 24 - 25; then continue with the steps below.

- 1-2 Follow steps 1 - 2 in "Changing the window picture input mode" on this page to select the video input mode for your connected VCR.

- 3 Put your VCR on an inactive channel (channel 3 or 4).

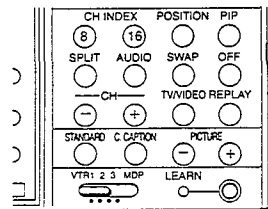
- 4 Change pay cable TV channels with the decoder box.

To control your cable converter box with the supplied Remote Commander  
See p. 74.

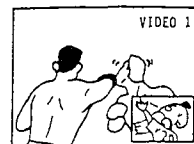
### Changing the position of the window picture

Follow these instructions to change the position of the window picture on the screen.

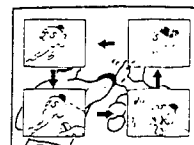
Remote Commander (Inner panel)



- 1 Press PIP to display a window picture.



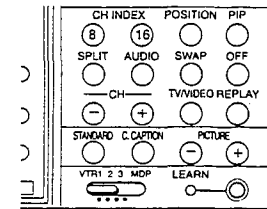
- 2 Press POSITION. Each time you press POSITION, the window picture moves as illustrated.



### Swapping the main and window pictures

Follow these instructions to swap the input signals of the main and window pictures.

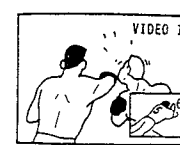
Remote Commander (Inner panel)



- 1 Press PIP to display a window picture.



- 2 Press SWAP. Each time you press SWAP, the images from the main and window pictures switch places.

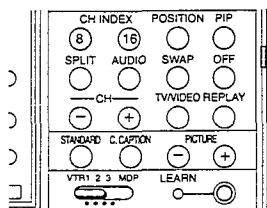


## Watching Two or More Pictures at Once (PIP)

### Displaying 8 TV channels at once – CH INDEX 8

Follow these instructions to display the main picture and 7 window pictures at once.

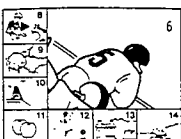
Remote Commander (Inner panel)



**1** Press PIP to display a window picture.



**2** Press CH INDEX 8 to display seven window pictures. Seven TV channels appear in numerical sequence, as window pictures.



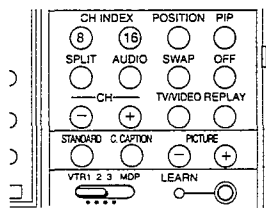
Each time you press CH INDEX 8, the next seven sequential channels appear (the main picture does not change).

To return to the normal screen  
Press OFF

### Displaying 16 TV channels at once – CH INDEX 16

Follow these instructions to display 16 window pictures at once.

Remote Commander (Inner panel)



**1** Press PIP to display a window picture.



**2** Press CH INDEX 16 to display 16 window pictures. 16 TV channels appear in numerical sequence, as window pictures.



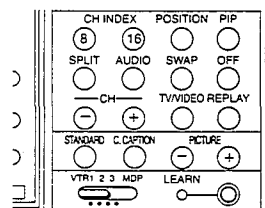
Each time you press CH INDEX 16, the next 16 sequential channels appear (the main picture does not change).

To return to the normal screen  
Press OFF

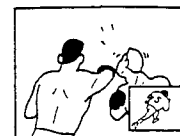
### Replaying the main picture as a window picture

Follow these instructions to replay the image that appeared in the main picture two seconds before, as a window picture.

Remote Commander (Inner panel)



Press REPLAY.

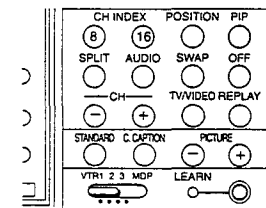


To return to the normal screen  
Press OFF

### Splitting the screen

Follow these instructions to split the screen, with the window picture on the left, and the main picture on the right.

Remote Commander (Inner panel)



Press SPLIT.



Window picture Main picture

To return to the normal screen  
Press OFF

**Note**  
When using SPLIT, vertical lines may appear elongated.

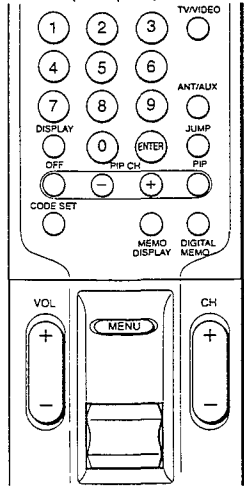
# Adjusting the Picture

You can adjust the picture (and sound, pp. 51 – 54) for each input mode (TV, VIDEO 1, VIDEO 2, VIDEO 3) by pressing TV/VIDEO on the TV or on the Remote Commander to select the input mode, before making the adjustments. These adjustments are retained in memory even when you turn off the TV, but are cancelled after you change the adjustments, or select a picture and sound mode (pp. 39 – 40).

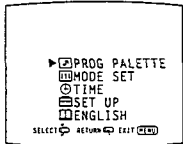
## Adjusting picture quality

Follow these instructions to adjust PICTURE, HUE, COLOR, BRIGHT (brightness) and SHARP (sharpness).

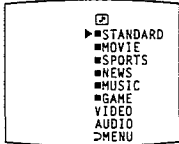
Remote Commander (Outer panel)



- 1** Press MENU.  
The main menu appears, and the cursor points to "PROG PALETTE."

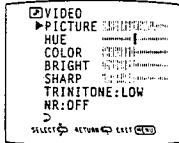


- 2** Click the rocker control.  
The program palette menu appears.



- 3** Press the rocker control up or down until the cursor points to "VIDEO."

- 4** Click the rocker control.  
The VIDEO screen appears.



- 5** Press the rocker control up or down until the cursor points to the item you want to adjust.

- 6** Click the rocker control.  
The adjustment screen appears.



- 7** Press the rocker control up or down to make the adjustment.

Picture quality	Press the rocker control down	Press the rocker control up
PICTURE	For decreased picture contrast with soft color	For increased picture contrast with vivid color
HUE	Skin tones become purplish	Skin tones become greenish
COLOR	For less color intensity	For more color intensity
BRIGHT	For less brightness	For more brightness
SHARP	For less sharpness	For more sharpness

- 8** Click the rocker control.  
The adjustment is complete, and the VIDEO screen automatically reappears.

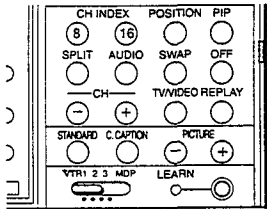


To adjust other items  
Repeat steps 5 – 8.

To restore the factory settings for all the items  
Select "STANDARD" on the program palette menu, and click the rocker control;  
or, press STANDARD on the Remote Commander.  
All the items, including TRINITONE (p. 48) and NR (p. 49) return to their original factory settings.

To adjust picture contrast  
You can also adjust picture contrast with the PICTURE +/- buttons on the Remote Commander.

(Inner panel)



Press + to increase picture contrast with vivid color.  
Press - to decrease picture contrast with soft color.  
The picture adjustment screen appears.

To return to the previous menu  
Press the rocker control up or down until the cursor points to " > MENU."  
Then click the rocker control.

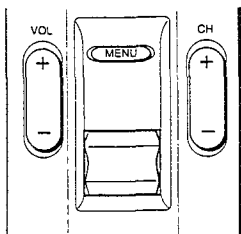
To return to the main menu  
Repeat the above, until you reach the main menu.

To return to the normal screen  
Press MENU on the Remote Commander.

## Setting the TRINITONE mode

Color picture tubes are usually manufactured with a fixed color temperature (tint) that determines the "warmth" (red tint) or "coolness" (blue tint) of the picture. Use the Sony Trinitone feature to adjust the picture color to your preference.

### Remote Commander



- 1 Press MENU.  
The main menu appears, and the cursor points to "PROG PALETTE."



- 2 Click the rocker control.  
The program palette menu appears.



- 3 Press the rocker control up or down until the cursor points to "VIDEO."

- 4 Click the rocker control.  
The VIDEO screen appears.



- 5 Press the rocker control up or down until the cursor points to "TRINITONE."

- 6 Click the rocker control.  
The mode display turns red.

- 7 Press the rocker control up or down to select "HIGH" or "LOW."

Select "HIGH" to make the picture cool (bluish).  
Select "LOW" to make the picture warm (reddish).

- 8 Click the rocker control.  
The setting is complete.

### To return to the previous menu

Press the rocker control up or down until the cursor points to "➤ MENU."

Then click the rocker control.

### To return to the main menu

Repeat the above, until you reach the main menu.

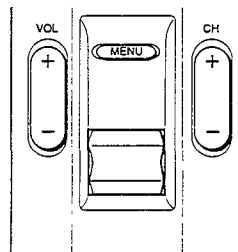
### To return to the normal screen

Press MENU on the Remote Commander.

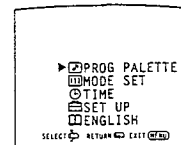
## Setting NR (picture noise reduction) ON or OFF

Follow these instructions to reduce picture noise.

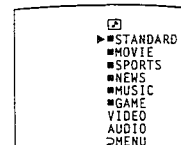
### Remote Commander



- 1 Press MENU.  
The main menu appears, and the cursor points to "PROG PALETTE."

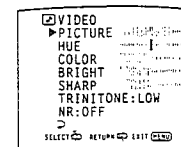


- 2 Click the rocker control.  
The program palette menu appears.

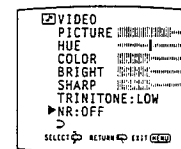


- 3 Press the rocker control up or down until the cursor points to "VIDEO."

- 4 Click the rocker control.  
The VIDEO screen appears.



- 5 Press the rocker control up or down until the cursor points to "NR."



- 6 Click the rocker control.  
The mode display turns red.

- 7 Press the rocker control up or down to select "ON" or "OFF"

Select "ON" to reduce picture noise.  
Select "OFF" to restore the normal picture.

- 8 Click the rocker control.  
The setting is complete.

### To return to the previous menu

Press the rocker control up or down until the cursor points to "➤ MENU."

Then click the rocker control.

### To return to the main menu

Repeat the above, until you reach the main menu.

### To return to the normal screen

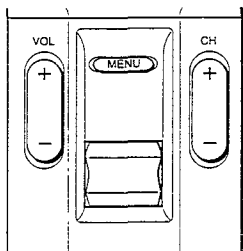
Press MENU on the Remote Commander.

## Adjusting the Picture

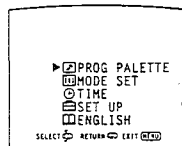
### Setting S-VIDEO ON or OFF

Follow these instructions to set S-VIDEO on or off, depending on the kind of video equipment you have connected to the TV. For instructions on connecting video equipment, see pp. 15 – 18.

Remote Commander (Outer panel)

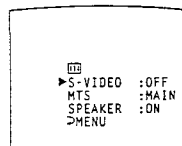


- 1 Press MENU.  
The main menu appears.



- 2 Press the rocker control up or down until the cursor points to "MODE SET."

- 3 Click the rocker control.  
The mode set menu appears, with the cursor pointing to "S-VIDEO."



- 4 Click the rocker control.  
The mode display turns red.

- 5 Press the rocker control up or down to select "ON" or "OFF."

- 6 Click the rocker control.  
The setting is complete.

To return to the previous menu

Press the rocker control up or down until the cursor points to "MENU."

Then click the rocker control.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen

Press MENU on the Remote Commander.

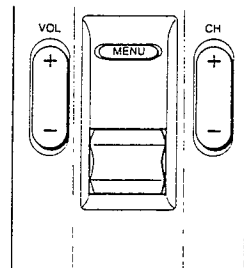
## Adjusting the Sound

### Selecting a sound mode

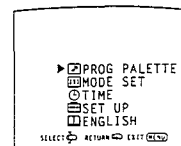
Use the DSP (Digital Sound Processor) menu to select the sound mode that best suits the type of sound you are listening to.

Example: Select JAZZ CLUB mode to enhance the effect when viewing a musical performance

Remote Commander



- 1 Press MENU.  
The main menu appears



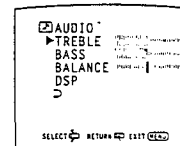
- 2 Press the rocker control up or down until the cursor points to "PROG PALETTE."

- 3 Click the rocker control.  
The program palette menu appears.



- 4 Press the rocker control up or down until the cursor points to "AUDIO."

- 5 Click the rocker control.  
The AUDIO screen appears.



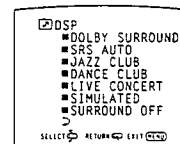
- 6 Press the rocker control up or down until the cursor points to "DSP"

- 7 Click the rocker control.  
The DSP menu appears.



- 8 Press the rocker control up or down until the cursor points to "JAZZ CLUB."

- 9 Click the rocker control.  
JAZZ CLUB mode is selected.



To select a different mode

Repeat steps 8 – 9. (See the next page for the different modes you can choose.)

To further adjust the sound

Follow the instructions on pp. 53 – 54.

To return to the previous menu

Press A/V WINDOW +/- until the cursor points to "MENU."

Then press RETURN.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen.

Press MENU on the Remote Commander.

# Adjusting the Sound

**When you select DOLBY SURROUND\* mode**  
 You receive wraparound sound with three-dimensional\*\* audio depth and presence when you connect main speakers and optional rear speakers.

**Note**  
 You must set REAR SPEAKER to "YES" (p. 56), or the display is blacked out and cannot be selected.  
 When using rear speakers, control the volume with the REAR VOLUME adjustment screen.

**When you select SRS AUTO mode**  
 You receive powerfully realistic sound that recaptures audio "clues" originally present but masked in the recording process, so that the action seems to happen all around you.

**When you select JAZZ CLUB mode**  
 You receive sound that gives a sense of space, with a touch of echo added.

**When you select DANCE CLUB mode**  
 You receive the sound effect of the hard floor and wall environment of a dance club.

**When you select LIVE CONCERT mode**  
 You receive sound that simulates the effect of being present at a live concert.

**When you select SIMULATED mode**  
 You receive monaural sound with a surround-like effect.

**When you select SURROUND OFF mode**  
 You receive sound without a surround effect.

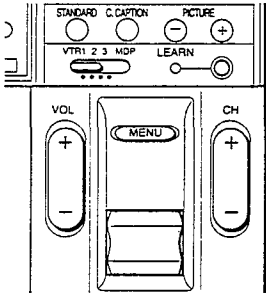
**To further adjust sound qualities**  
 Follow the instructions on pp. 53 – 54.

- \* Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. numbers 3,632,886, 3,746,792 and 3,959,590; Canadian numbers 1,004,603 and 1,037,877. "Dolby" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.
- \*\*Three-dimensional qualities apply to sound sources identified by the DOLBY SURROUND mark (DD).

## Adjusting sound quality

Follow these instructions to adjust the TREBLE, BASS and BALANCE.

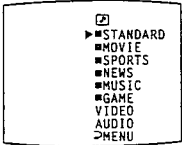
Remote Commander (Inner panel)



- Press MENU.  
 The main menu appears, and the cursor points to "PROG PALETTE."



- Click the rocker control.  
 The program palette menu appears.



- Press the rocker control up or down until the cursor points to "AUDIO."

- Click the rocker control.  
 The AUDIO screen appears.



- Press the rocker control up or down until the cursor points to the item you want to adjust.

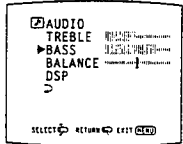
- Click the rocker control.  
 The adjustment screen appears.



- Press the rocker control up or down to make the adjustment.

Sound quality	Press the rocker control down	Press the rocker control up
TREBLE	To decrease the treble response	To increase the treble response
BASS	To decrease the bass response	To increase the bass response
BALANCE	To emphasize the left speaker's volume	To emphasize the right speaker's volume

- Click the rocker control.  
 The adjustment is complete, and the AUDIO screen automatically reappears.



**To adjust other items**  
 Repeat steps 5 – 9.

**To restore the factory settings for all the items**  
 Select "STANDARD" on the program palette menu, and click the rocker control; or, press STANDARD on the Remote Commander.  
 All the items return to their original factory settings.

**To return to the previous menu**  
 Press the rocker control up or down until the cursor points to "➤ MENU." Then click the rocker control.

**To return to the main menu**  
 Repeat the above, until you reach the main menu.

**To return to the normal screen**  
 Press MENU on the Remote Commander.

## Adjusting the Sound

### Selecting an MTS (Multichannel TV Sound) mode

Follow these instructions to select an MTS mode.

Select MAIN mode to listen to stereo sound.

The STEREO indicator on the TV lights up whenever a stereo broadcast is received.

Select SAP mode to listen to Second Audio Programs.

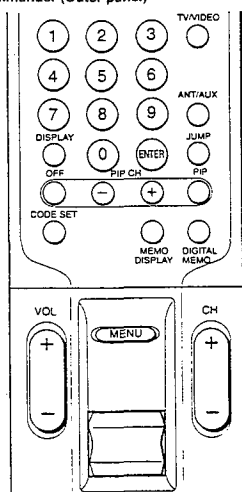
Select MONO mode to eliminate excessive noise during stereo broadcasts, caused by a weak incoming signal.

#### Note

If the TV is in video mode, the "MTS" display is shaded and cannot be selected.

Press TV/VIDEO on the TV or on the Remote Commander to change to TV mode.

Remote Commander (Outer panel)

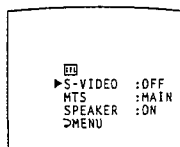


- 1 Press MENU.  
The main menu appears.



- 2 Press the rocker control up or down until the cursor points to "MODE SET."

- 3 Click the rocker control.  
The mode set menu appears.



- 4 Press the rocker control up or down until the cursor points to "MTS."

- 5 Click the rocker control.  
The mode display turns red.

- 6 Press the rocker control up or down to select the mode you want.  
Each time you press the rocker control up or down, "MAIN," "SAP" and "MONO" appear in sequence.

- 7 Click the rocker control.  
The mode is selected.

#### To return to the previous menu

Press the rocker control up or down until the cursor points to "MENU." Then click the rocker control.

#### To return to the main menu

Repeat the above, until you reach the main menu.

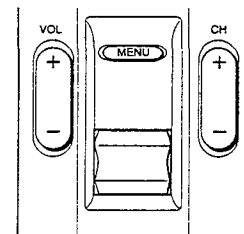
#### To return to the normal screen

Press MENU on the Remote Commander.

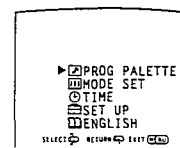
### Setting SPEAKER ON or OFF

Follow these instructions to turn the TV speakers off when you connect an audio system (p.19), and on when you want to listen to the sound from the TV speakers.

Remote Commander

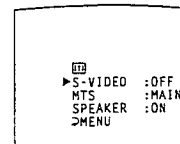


- 1 Press MENU.  
The main menu appears.



- 2 Press the rocker control up or down until the cursor points to "MODE SET."

- 3 Click the rocker control.  
The mode set menu appears.



- 4 Press the rocker control up or down until the cursor points to "SPEAKER."

- 5 Click the rocker control.  
The mode display turns red.

- 6 Press the rocker control up or down to select "ON" or "OFF."

- 7 Click the rocker control.  
The setting is complete.

#### To return to the previous menu

Press the rocker control up or down until the cursor points to "MENU." Then click the rocker control.

#### To return to the main menu

Repeat the above, until you reach the main menu.

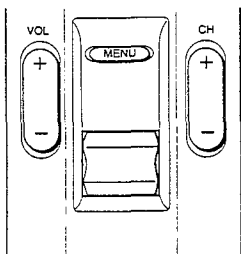
#### To return to the normal screen

Press MENU on the Remote Commander.

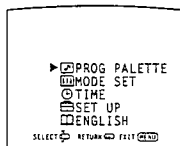
## Setting REAR SPEAKER

Set REAR SPEAKER to "YES" to use the detachable or optional speakers as rear speakers (pp. 11 – 12).

Remote Commander

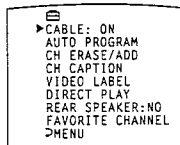


- 1 Press MENU.  
The main menu appears.



- 2 Press the rocker control up or down until the cursor points to "SET UP."

- 3 Click the rocker control.  
The set up menu appears.



- 4 Press the rocker control up or down until the cursor points to "REAR SPEAKER."

- 5 Click the rocker control.  
The mode display turns red.

- 6 Press the rocker control up to select "YES."

- 7 Click the rocker control.  
The REAR SPEAKER screen appears.



- 8 Press the rocker control up or down until the cursor points to the item you want to adjust.

- 9 Click the rocker control.  
The adjustment screen appears.



- 10 Use the rocker control to make the adjustment.

### REAR VOLUME

Press the rocker control down to decrease the rear speaker volume.  
Press the rocker control up to increase the rear speaker volume.

### INPUT BALANCE (Use when you enjoy DOLBY SURROUND.)

Press the rocker control down to improve the input balance.  
(Set to the lowest point for best input balance little or no sound is heard from the rear speakers.)

### Notes

- Setting REAR SPEAKER to "NO" does not turn off the rear speaker sound. Control the rear speaker volume with the REAR VOLUME adjustment.
- While the INPUT BALANCE adjustment screen is displayed, the sound from the front speakers is cut off.

- 11 Click the rocker control.  
The setting is complete.

To set REAR SPEAKER to "NO"  
Repeat steps 1 – 11, and select "NO" in step 6.

### To return to the previous menu

Press the rocker control up or down until the cursor points to "MENU." Then click the rocker control.

### To return to the main menu

Repeat the above, until you reach the main menu.

### To return to the normal screen

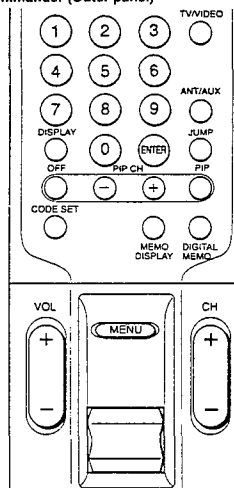
Press MENU on the Remote Commander.

## Setting channel captions — CH CAPTION

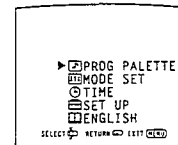
Follow these instructions to caption each channel number display with a name, for instance, the television station call letters. (You can set up to four letters or numbers).

Example: Caption channel 15 as "NBC."

Remote Commander (Outer panel)

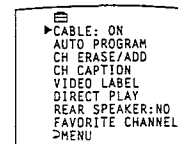


- 1 Press MENU.  
The main menu appears.



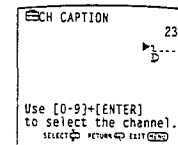
- 2 Press the rocker control up or down until the cursor points to "SET UP."

- 3 Click the rocker control.  
The set up menu appears.

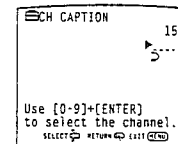


- 4 Press the rocker control up or down until the cursor points to "CH CAPTION."

- 5 Click the rocker control.  
The CH CAPTION screen appears.

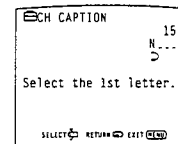


- 6 Press CH +/-, or press 1, 5 and ENTER to set channel "15."



- 7 Click the rocker control.  
The first caption space turns red.

- 8 Press the rocker control up or down to select "N." Each time you press the rocker control up or down, "0" – "9," "A" – "Z," "&," "?," "-" and "." (blank space) appear in sequence.



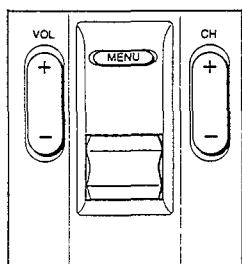
- 9 Click the rocker control.  
The second caption space turns red.

(Continued)

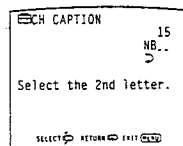
## Customizing the Screen Display

### Setting channel captions.—CH CAPTION (Cont'd. from prev. page)

Remote Commander

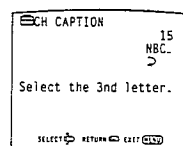


- 10** Press the rocker control up or down to select "B."



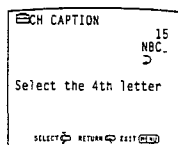
- 11** Click the rocker control.  
The third caption space turns red.

- 12** Press the rocker control up or down to select "C."



- 13** Click the rocker control.  
The fourth caption space turns red.

- 14** Press the rocker control up or down to select a blank space.



- 15** Click the rocker control.  
The setting is complete.  
When you select or display the channel number, the channel caption also appears.

**To caption more channels**  
Repeat steps 6 – 15.

**To erase unnecessary captions**  
Display the CH CAPTION screen, select the channel with the caption you want to erase, and select blank spaces for the channel caption; then click the rocker control.  
The caption for that channel is erased.

**To return to the previous menu**  
Press the rocker control up or down until the cursor points to "➤ MENU." Then click the rocker control.

**To return to the main menu**  
Repeat the above, until you reach the main menu.

**To return to the normal screen**  
Press MENU on the Remote Commander.

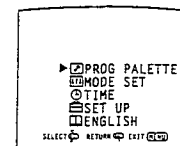
**Note**  
You can set up to 32 channel captions. If the memory is full, "The memory is full, sorry" appears on the screen. Erase any unnecessary captions, and begin again.

### Setting VIDEO LABEL

Follow these instructions to label each input mode, in order to identify the equipment connected to each input terminal.

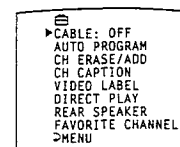
**Example:** Label VIDEO 1 IN as "VHS."

- 1** Press MENU.  
The main menu appears.



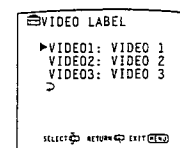
- 2** Press the rocker control up or down until the cursor points to "SET UP."

- 3** Click the rocker control.  
The set up menu appears.



- 4** Press the rocker control up or down until the cursor points to "VIDEO LABEL."

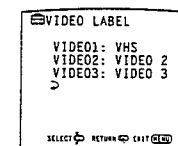
- 5** Click the rocker control.  
The VIDEO LABEL screen appears.



- 6** Press the rocker control up or down until the cursor points to the input mode you want to label. (In this case, the cursor is already pointing to "VIDEO 1.")

- 7** Click the rocker control.  
The label display turns red.

- 8** Press the rocker control up or down to select "VHS."



Each time you press the rocker control up or down, the label changes:

VIDEO 1 → BETA → 8mm → VHS → LD → S-VIDEO

- 9** Click the rocker control.  
The setting is complete.  
When you select or display the video mode, the video label appears.

**To label other input modes**  
Repeat steps 6 – 9.

**To change a label**  
Same as above.

**To return to the previous menu**  
Press the rocker control up or down until the cursor points to "➤ MENU." Then click the rocker control.

**To return to the main menu**  
Repeat the above, until you reach the main menu.

**To return to the normal screen**  
Press MENU on the Remote Commander.

# Using Timer-Activated Functions



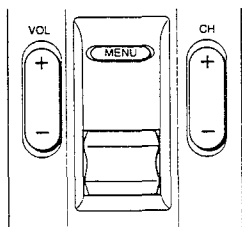
## Setting DAYLIGHT SAVING

If you live in an area that uses daylight savings time, set DAYLIGHT SAVING to "YES" or "NO" depending on the season, before setting the current time. At the next daylight savings date, you will be able to automatically adjust all the time-related settings (CURRENT TIME, ON/OFF TIMER and CHANNEL BLOCK) simply by changing the DAYLIGHT SAVING setting.

### When setting DAYLIGHT SAVING:

- **After the first Sunday in April (spring daylight savings)**  
Set to "YES" before setting the current time.  
Then, on the last Sunday in October (fall daylight savings), set to "NO."  
*All the time-related settings automatically move one hour back.*
- **After the last Sunday in October (fall daylight savings)**  
Set to "NO" before setting the current time.  
Then, on the first Sunday in April (spring daylight savings), set to "YES."  
*All the time-related settings automatically move one hour ahead.*

### Remote Commander



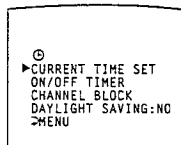
Follow these instructions to set DAYLIGHT SAVING to "YES" or "NO."

- 1 Press MENU.  
*The main menu appears.*



- 2 Press the rocker control up or down until the cursor points to "TIME."

- 3 Click the rocker control.  
*The time menu appears.*



- 4 Press the rocker control up or down until the cursor points to "DAYLIGHT SAVING."

- 5 Click the rocker control.  
*The mode display turns red.*

- 6 Press the rocker control up or down to select "YES" or "NO."  
*The setting is complete.*

- 7 Click the rocker control.

### To return to the previous menu

Press the rocker control up or down until the cursor points to "MENU."  
Then click the rocker control.

### To return to the main menu

Repeat the above, until you reach the main menu.

### To return to the normal screen.

Press MENU on the Remote Commander.

## Setting the clock — CURRENT TIME SET

Follow these instructions to set the current time. The correct current time must be set in order to use the other time-related functions (DAYLIGHT SAVING, ON/OFF TIMER, CHANNEL BLOCK).

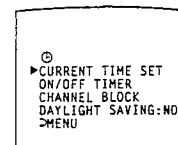
**Example:** Set the time to 3:15 PM, Monday.

- 1 Press MENU.  
*The main menu appears.*



- 2 Press the rocker control up or down until the cursor points to "TIME."

- 3 Click the rocker control.  
*The time menu appears, and the cursor points to "CURRENT TIME SET."*



- 4 Click the rocker control again.  
*The CURRENT TIME SET screen appears, with a reminder to set DAYLIGHT SAVING.*



If you do not need to set DAYLIGHT SAVING, click the rocker control and continue from step 5.

## To set daylight saving

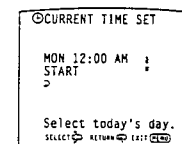
- a Press the rocker control up or down until the cursor points to "DAYLIGHT SAVING."
- b Click the rocker control.  
*The time menu appears, and the cursor points to "DAYLIGHT SAVING."*
- c Click the rocker control.
- d Press the rocker control up or down to select "YES" or "NO."
- e Click the rocker control.  
*The setting is complete.*

## To set the time

Press the rocker control up or down until the cursor points to "CURRENT TIME SET"; click the rocker control, then continue from step 5.

- 5 Click the rocker control.  
*The CURRENT TIME SET screen appears, and the "SUN" display appears (red).*

- 6 Press the rocker control up or down to select "MON."  
*Each time you press the rocker control up or down, the day changes consecutively.*

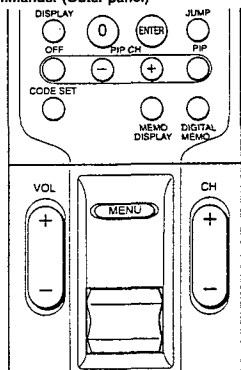


(Continued)

## Setting the clock — CURRENT TIME SET

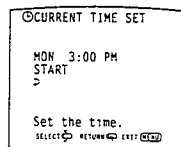
(Cont'd. from prev. page)

Remote Commander (Outer panel)



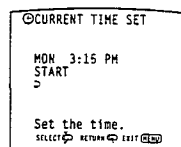
- 7** Click the rocker control.  
The hour and am/pm displays turn red.

- 8** Press the rocker control up or down to set "3:00PM."  
Each time you press the rocker control up or down, the hour changes in sequence beginning with "12:00AM."



- 9** Click the rocker control.  
The minute display turns red.

- 10** Press the rocker control up or down to select "15" (minutes).  
Each time you press the rocker control up or down, the minutes change in sequence.



- 11** Click the rocker control.  
The cursor points to "START."

- 12** Check the actual time, and click the rocker control to start the clock.  
The setting is complete.

### To reset the time

Display the CURRENT TIME SET screen and repeat steps 5 – 12.

To display the current time  
Press DISPLAY.

To return to the previous menu  
Press the rocker control up or down until the cursor points to "MENU."  
Then click the rocker control.

To return to the main menu  
Repeat the above, until you reach the main menu.

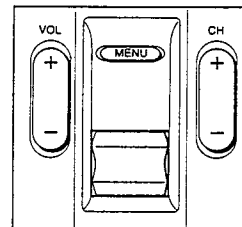
To return to the normal screen.  
Press MENU on the Remote Commander.

## Setting the ON/OFF TIMER

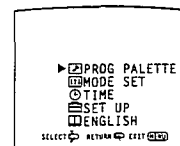
Follow these instructions to make the program of your choice appear on the screen at a specified time.

**Example:** Set the timer to turn on the TV every Monday through Friday at 1:30 AM for 3 hours, on channel 8, as PROGRAM 1. (You can set up to three programs.)

Remote Commander

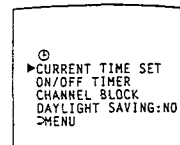


- 1** Press MENU.  
The main menu appears.



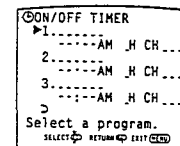
- 2** Press the rocker control up or down until the cursor points to "TIME."

- 3** Click the rocker control.  
The time menu appears.



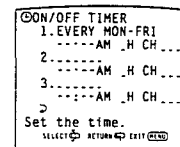
- 4** Press the rocker control up or down until the cursor points to "ON/OFF TIMER."

- 5** Click the rocker control.  
The ON/OFF TIMER screen appears, and the cursor points to "1."

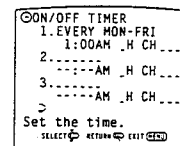


- 6** To set program 1, click the rocker control.  
(To set program 2 or 3, press the rocker control up or down until the cursor points to that program; then click the rocker control.)  
The day input space turns red.

- 7** Press the rocker control up or down to select "EVERY MON-FRI"; then click the rocker control.  
Each time you press the rocker control up, the days of the week change as shown in Fig. 1 (p. 63).



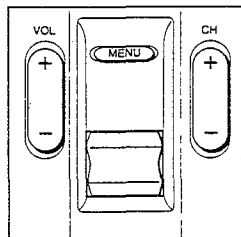
- 8** Press the rocker control up or down to select "1:00AM"; then click the rocker control.  
Each time you press the rocker control up or down, the hour changes in sequence.



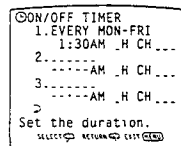
(Continued)

## Setting the ON-OFF TIMER (Cont'd from prev. page)

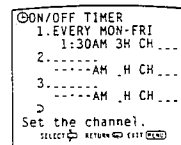
Remote Commander



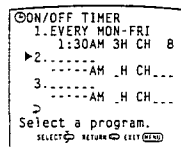
- 9** Press the rocker control up or down to select "30" (minutes); then click the rocker control. Each time you press the rocker control up or down, the minutes change in sequence.



- 10** Press the rocker control up or down to select "3" (hour duration); then click the rocker control. Each time you press the rocker control up or down, the duration changes from "1" – "6" in sequence.



- 11** Press the rocker control up or down to select "8" (channel); then click the rocker control. The **TIMER/STAND BY** indicator lights, indicating that the setting is complete. Each time you press the rocker control up or down, the channel number changes from 1 – 125 in sequence.



The display "TV WILL TURN OFF" appears on the screen one minute before the timer duration ends.

**To set program 2 or 3.**  
Click the rocker control and repeat steps 6 – 11.

**To erase an ON/OFF TIMER setting**  
Display the ON/OFF TIMER screen, select the setting you want to erase, and select the underlined spaces for the day setting. The ON/OFF TIMER setting is erased.

**To enter a new ON/OFF TIMER setting**  
Display the ON/OFF TIMER screen and repeat steps 6 – 11.

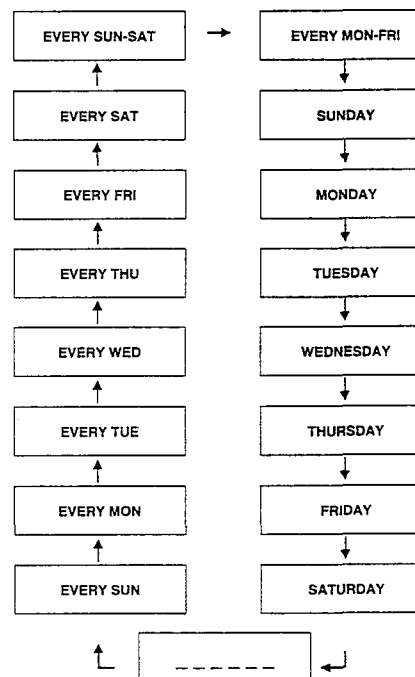
**To return to the previous menu**  
Press the rocker control up or down until the cursor points to "➤ MENU." Then click the rocker control.

**To return to the main menu**  
Repeat the above, until you reach the main menu.

**To return to the normal screen.**  
Press MENU on the Remote Commander.

**Note**  
If you unplug the TV or a power failure occurs, both the clock and timer settings will be erased. Reset the current time; then set the timer.

**Fig. 1**  
**Selecting the day(s) of the week**  
When you press the rocker control up, the days of the week appear in the following order:



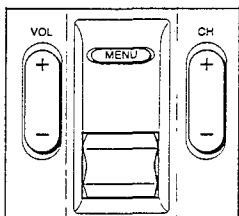
## Using Timer-Activated Functions

### Setting CHANNEL BLOCK

Follow these instructions to prevent a channel from appearing on the screen during the time that you specify. You can use this function to prevent children from watching unsuitable programs.

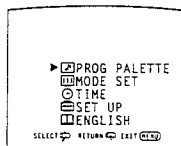
**Example:** Set CHANNEL-BLOCK every Saturday at 4:30 PM for 1 hour, on Channel 12.

Remote Commander



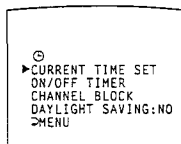
**Note**  
If you have not set the current time, the "CHANNEL BLOCK" display is shaded and cannot be selected.

- 1 Press MENU.  
The main menu appears.

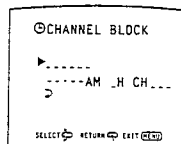


- 2 Press the rocker control up or down until the cursor points to "TIME."

- 3 Click the rocker control.  
The time menu appears.

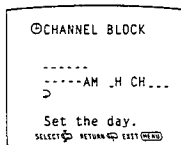


- 4 Press the rocker control up or down until the cursor points to "CHANNEL BLOCK."

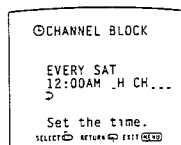


- 5 Click the rocker control.  
The CHANNEL BLOCK screen appears, and the cursor points to the day input space.

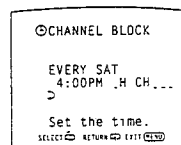
- 6 Click the rocker control.  
The day input space turns red.



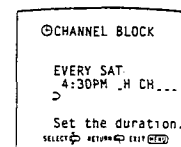
- 7 Press the rocker control up or down to select "EVERY SAT"; then click the rocker control.  
Each time you press the rocker control up or down, the days of the week change as shown in Fig. 1 (p. 65).



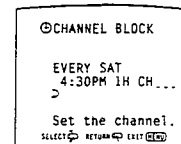
- 8 Press the rocker control up or down to select "4:00PM"; then click the rocker control.  
Each time you press the rocker control up or down, the hour changes in sequence.



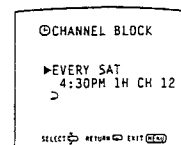
- 9 Press the rocker control up or down to select ":30" (minutes); then click the rocker control.  
Each time you press the rocker control up or down, the minutes change in sequence.



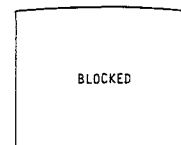
- 10 Press the rocker control up or down to select "1" (hour duration); then click the rocker control.  
Each time you press the rocker control up or down, the duration changes from "1" – "6" in sequence.



- 11 Press the rocker control up or down to select "12" (channel); then click the rocker control.  
The setting is complete.  
Each time you press the rocker control up or down, the channel number changes from "1" – "125" in sequence.



At the specified time, "BLOCKED" appears in red on the screen, and the picture of the specified channel is blocked and the sound is muted.



**To erase a CHANNEL BLOCK setting**  
Display the CHANNEL BLOCK screen and select the underlined spaces for the day setting.  
The CHANNEL BLOCK setting is erased.

**To enter a new CHANNEL BLOCK setting**  
Display the CHANNEL BLOCK screen and repeat steps 4 – 10. (You can only set one CHANNEL BLOCK at a time.)

**To return to the previous menu**  
Press the rocker control up or down until the cursor points to "➤ MENU."  
Then click the rocker control.

**To return to the main menu**  
Repeat the above, until you reach the main menu.

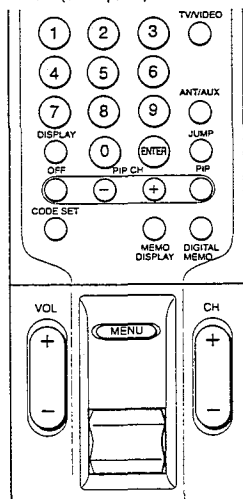
**To return to the normal screen.**  
Press MENU on the Remote Commander.

**Note**  
If the ON/OFF TIMER is set for an overlapping time (pp. 65 – 66), the later time setting takes precedence. For example, if CHANNEL BLOCK is set for 2:00 PM and ON/OFF TIMER is set for 3:00 PM, ON/OFF TIMER will take effect at 3:00 PM.

# Setting FAVORITE CHANNEL

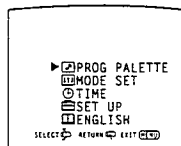
By setting FAVORITE CHANNEL, you can select the channels you use most frequently (up to seven channels) simply by clicking the rocker control on the Remote Commander.

Remote Commander (Outer panel)



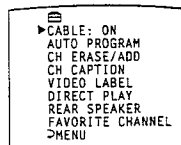
Follow these instructions to set the channels.

- 1 Press MENU.  
The main menu appears.



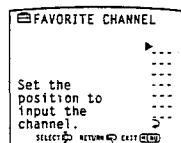
- 2 Press the rocker control up or down until the cursor points to "SET UP."

- 3 Click the rocker control.  
The set up menu appears.



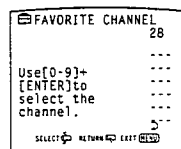
- 4 Press the rocker control up or down until the cursor points to "FAVORITE CHANNEL."

- 5 Click the rocker control.  
The FAVORITE CHANNEL screen appears, and the cursor points to the first channel position.



- 6 Press the rocker control up or down to select the channel position; then click the rocker control.

- 7 Press 0 – 9 and ENTER to set the channel number.



- 8 Click the rocker control.  
The setting is complete.

**To set other channels**  
Repeat steps 6 – 8.

**To erase a favorite channel setting**  
Press the rocker control up or down until the cursor points to the channel number you want to erase; click the rocker control, then press 0 and ENTER.

**To reset a favorite channel setting**  
Display the FAVORITE CHANNEL screen and repeat steps 6 – 8.

**To return to the previous menu**  
Press the rocker control up or down until the cursor points to "MENU." Then click the rocker control.

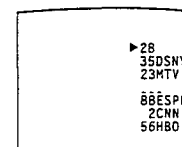
**To return to the main menu**  
Repeat the above, until you reach the main menu.

**To return to the normal screen.**  
Press MENU on the Remote Commander.

## Selecting a favorite channel

After setting the channels, follow these instructions to select the channel you want to watch.

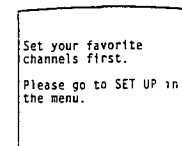
- 1 Click the rocker control.  
The FAVORITE CHANNEL display appears.



**Note**  
If you have set channel captions (pp. 57 – 58), the captions appear with the channel numbers.

- 2 Press the rocker control up or down to select the channel you want to watch; then click the rocker control.  
The channel is selected.

If you click the rocker control on the Remote Commander before setting FAVORITE CHANNEL, this screen appears.



Follow steps 1 – 8 to set your favorite channels, and then make the selection.

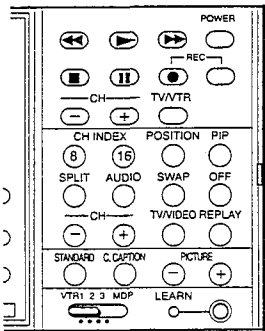
# Using the Programmable Remote Commander

You can operate other video equipment (such as VCRs, video disc players and cable boxes) that have an infrared remote detector with this supplied Remote Commander.

## Operating Sony video equipment

Follow these instructions to operate Sony video cassette recorders (Beta, 8 mm and VHS) and video disc players (including multi-disc players).

Remote Commander (Inner panel)



1 Set the VTR1-2-3 MDP selector according to the video equipment you want to operate.

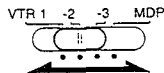


Fig. 2: Video equipment settings

If you want to operate a:	set to:
Beta, ED Beta VCR	VTR 1
8 mm VCR	VTR 2
VHS VCR	VTR 3
Video disc player	MDP

2 Use the video operating buttons to control the connected equipment.

Fig. 3: Operating a VCR (VTR1, 2, 3)	
To turn on or off	Press POWER.
To change channels (when watching TV programs through the VCR's tuner)	Press CH +/-
To record	Press ● and REC simultaneously.
To play	Press ►
To stop	Press ■.
To fast forward	Press ►►
To rewind the tape	Press ◄◄.
To pause	Press   . To resume normal playback, press again.
To search the picture forward and backward	Keep pressing ►► or ◄◄ during playback. To resume normal playback, release the button.
To change input mode	Press TV/VTR.

Fig. 4: Operating a Video Disc Player (MDP)	
To turn on or off	Press POWER.
To play	Press ►
To stop	Press ■.
To pause	Press   . To resume normal playback, press again. <b>Note</b> This function is effective only for CAV (standard-play disc). With CLV (extended-play disc), the TV goes off (standby mode) if you press   .
To search the picture forward and backward	Keep pressing ►► or ◄◄ during playback. To resume normal playback, release the button.

- Notes**
- If the video equipment does not have a certain function, the corresponding button on this Remote Commander will not operate.
  - If you set another manufacturer's code to a VTR1-2-3 MDP selector position (pp. 72 – 73), you must also set the Sony code to operate Sony equipment.

**Caution**  
When you replace the batteries, do it within approximately 30 minutes. Otherwise the settings you made under the Pre-Programmed function (pp. 72 – 74) and Learning function (p. 75) may be erased.

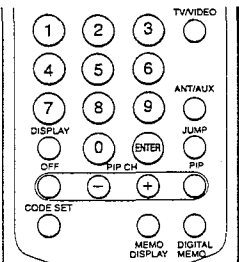
# Using the Programmable Remote Commander

## Operating non-Sony or Sony video equipment

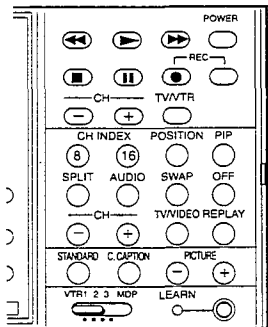
Follow these instructions to set the manufacturer's code, which will enable you to operate non-Sony and Sony video equipment with the pre-programmed Remote Commander.

**Example:** Operate an RCA video cassette recorder connected to the VIDEO 2 IN jacks.

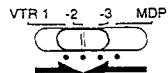
Remote Commander  
(Outer panel)



(Inner panel)

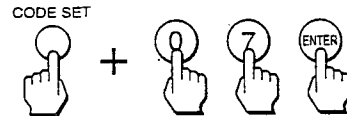


**1** Set the VTR1-2-3 MDP selector to VTR2.



**Note**  
To use another manufacturer's equipment besides a Sony VCR, set the selector to a position not being used for your Sony video equipment.

**2** While pressing CODE SET, press 0, 7 and ENTER to set RCA's code number. (For manufacturer code numbers, see Figs. 5, 6 and 7 on p. 73.)



A long beep sounds, indicating that the code has been set.

### Note

If you press a wrong code, or if the code has not been set, four short beeps sound. Repeat step 3 to set the code.

**3** Use the video operating buttons to operate the connected equipment. (see Fig. 3 on p. 70 and Fig. 4 on p. 71.)

Fig. 5: VCR manufacturer code numbers

MANUFACTURER	CODE
SONY	01, 02, 03
CANON	05
EMERSON	22, 30, 33
FISHER	10, 11, 12, 15
FUNAI	29
GENERAL ELECTRIC	05, 08
GOLDSTAR	25
HITACHI	07, 08, 36
JVC	16, 35
MAGNAVOX	05, 06, 09
MITSUBISHI	18, 19, 26, 27
MULTITECH	29
NEC	16, 23, 31
PANASONIC	05, 06
PHILCO	05, 06
PHILIPS	05, 06, 09
QUASAR	05, 06
RCA	07, 08
SAMSUNG	24, 32
SANYO	11, 15
SCOTT	21
SHARP	13, 14
SHINTOM	34
SYLVANIA	05, 06, 09
SYMPHONIC	29
TEKNIKA	28, 29
TOSHIBA	20, 21
TOTE VISION	25
ZENITH	17

Fig. 6: MDP manufacturer code numbers

MANUFACTURER	CODE
SONY	04
KENWOOD	58
MAGNAVOX	52
MARANZ	54
MITSUBISHI	51
PANASONIC	55
PHILIPS	52
PIONEER	51
RCA	51
SANYO	57
SHARP	56
YAMAHA	53

Fig. 7: Sony equipment and code numbers

SONY EQUIPMENT	CODE
Beta, ED Beta VCR	01
8 mm VCR	02
VHS VCR	03
Video disc player	04

### Note

In some rare cases, you may not be able to operate your non-Sony video equipment with the supplied Remote Commander. This is because your equipment may use a code that is not provided with this Remote Commander. In this case, please use the equipment's own remote control unit.

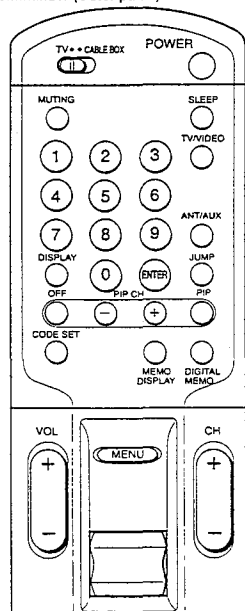
## Using the Programmable Remote Commander

### Operating a cable converter box

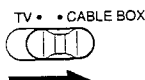
Follow these instructions to set the manufacturer's code, which will enable you to operate a connected cable converter box with the pre-programmed Remote Commander.

**Example:** Operate a connected Zenith cable converter box.

Remote Commander (Outer panel)



**1** Set the TV/CABLE BOX selector to CABLE BOX.



#### Notes

- If more than one code number is listed, try entering them one by one, until you come to the correct code for your equipment.
- If you enter a new code number, the code number you previously entered at that setting is erased.
- In some rare cases, your equipment may use a code that is not provided with this Remote Commander and you may not be able to operate your cable converter box with the supplied Remote Commander. In this case, use the equipment's own remote control unit.

**2** While pressing CODE SET, press 6 and 8 (Zenith's code number — see Fig. 8) and ENTER.

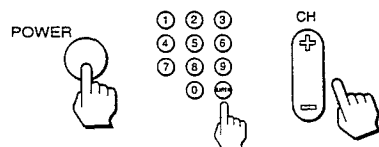


A long beep sounds, indicating that the code has been set.

#### Note

If you press a wrong code, or if the code has not been set, four short beeps sound. Repeat step 2 to set the code.

**3** Use the TV control buttons (POWER, 0–9, ENTER and CH +/-) to operate the cable converter box.



#### To return to the normal screen

Set the TV/CABLE BOX selector to TV; then use the TV control buttons to control the TV.

#### For more details on operating the cable box

Refer to the operating instructions that come with the cable box.

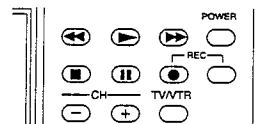
Fig. 8: Cable box manufacturer code numbers

MANUFACTURER	CODE
JERROLD	60, 61, 62, 63, 64, 65
PIONEER	69, 70
SCIENTIFIC ATLANTA	66, 67
TOCOM	71, 72
ZENITH	68

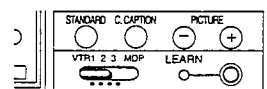
### Operating non-Sony or Sony audio and video equipment (Learning function)

Follow these instructions to "teach" any of the programmable buttons to operate the function of another Remote Commander. Use Learning in order to operate non-Sony and Sony audio equipment, and a remote controlled cable converter box or video equipment whose manufacturer code is not listed (Fig. 5, Fig. 6 – p. 73; Fig. 8 – p. 74).

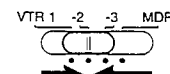
Remote Commander (Inner panel)  
Programmable buttons



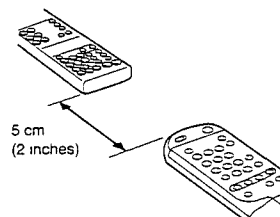
LEARN button and indicator lamp



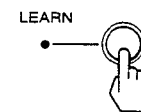
**1** Set the VTR1-2-3 MDP selector to VTR3 or MDP (Learning will not work in VTR1 or VTR2 settings.)



**2** Place the supplied Remote Commander head to head with equipment's remote commander, approximately 5 cm (2 inches) apart.



**3** Press LEARN.  
The LEARN indicator lights up (red).



**4** Momentarily press the button of the supplied Remote Commander that you want to learn a function.  
The LEARN indicator goes off and lights up again, and a short beep sounds, indicating that the Remote Commander is ready for learning.

The Remote Commander beeps repeatedly if an error has occurred. Repeat this step.

**5** Press and hold down the button of the other remote commander, whose function you want to "teach," until the LEARN indicator turns red.  
A long beep sounds and the LEARN indicator goes off and lights up again, indicating that learning is complete. If not, repeat steps 4 and 5.

**6** Repeat steps 4 and 5 to teach functions to other buttons.

**7** Press LEARN.  
The LEARN indicator lamp lights up (red), then goes off, indicating that learning is complete.

#### For accurate learning

Do not move the remote commanders during the learning process.

#### Notes

- If the memory is full, three short beeps sound and the LEARN indicator flashes off and on. Use learning to re-program a button whose learned function you do not use often; the previously learned function is erased.
- If the other remote commander's signal cannot be learned, a short beep sounds and the LEARN indicator flashes once.
- If you press a button that cannot be used for learning, four short beeps sound and the LEARN indicator flashes four times.

## Using the Programmable Remote Commander

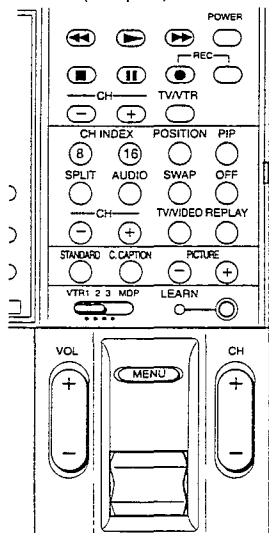
### Selecting a VCR mode directly — DIRECT PLAY

Follow these instructions to switch from TV to VCR mode by simply pressing the ► (playback) button on the supplied Remote Commander.

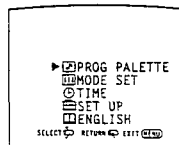
**Example:** Connect your VCR to the VIDEO 1 IN jacks, and set the VTR1-2-3 MDP selector to VTR2. When you press ►, the input mode changes to the VCR connected to the VIDEO 1 IN jacks.

After completing the steps below, the VTR selector position is retained in the TV's memory.

Remote Commander (Inner panel)

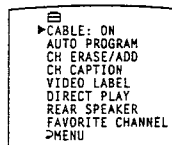


- 1 Press MENU.  
The main menu appears.



- 2 Press the rocker control up or down until the cursor points to "SET UP."

- 3 Click the rocker control.  
The set up menu appears.



- 4 Press the rocker control up or down until the cursor points to "DIRECT PLAY."

- 5 Click the rocker control.  
A message screen appears.



**Note**  
This screen reminds you to set the manufacturer's code, if you have not already done so (pp. 72 – 73).

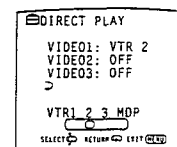
- 6 Click the rocker control again.  
The DIRECT PLAY screen appears.



- 7 Press the rocker control up or down until the cursor points to the video input mode. (When the video equipment is connected to VIDEO 1 IN, select "VIDEO1.")

- 8 Click the rocker control.  
The mode display turns red.

- 9 Press the rocker control up or down to select the VTR selector mode you have set on the Remote Commander. (When the VTR1-2-3 MDP selector is set to VTR2, select "VTR 2.")  
Each time you press the rocker control up or down, "VTR 1," "VTR 2," "VTR 3," "MDP" and "OFF" appear in sequence.



- 10 Click the rocker control.  
The direct play setting is complete.

**To set direct play for other connected video equipment**  
Repeat steps 7 – 10.



**To return to the previous menu**  
Press the rocker control up or down until the cursor points to "► MENU."  
Then click the rocker control.

**To return to the main menu**  
Repeat the above, until you reach the main menu.

**To return to the normal screen.**  
Press MENU on the Remote Commander.

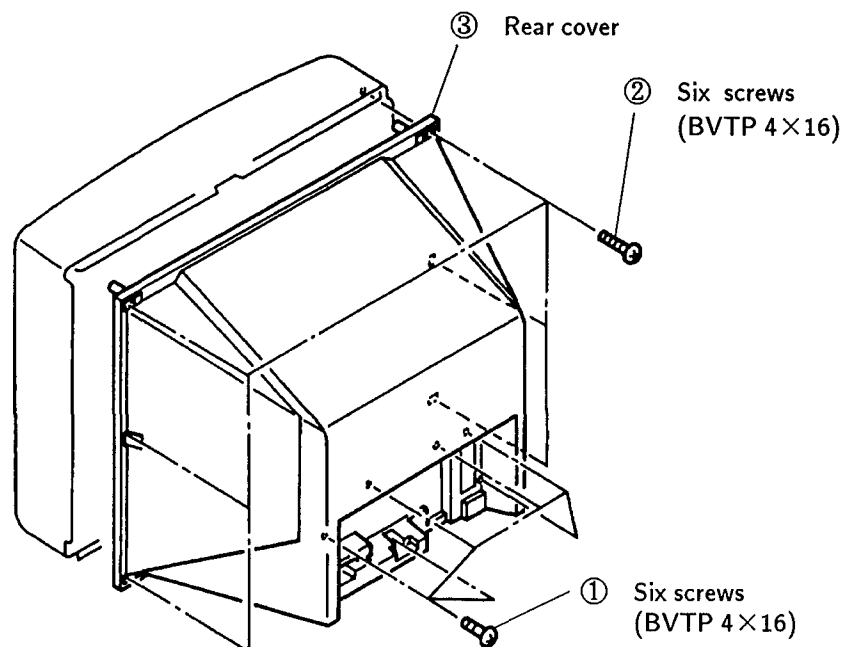
## Appendix Troubleshooting

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed here. If the problem still cannot be solved, contact your nearest service facility.

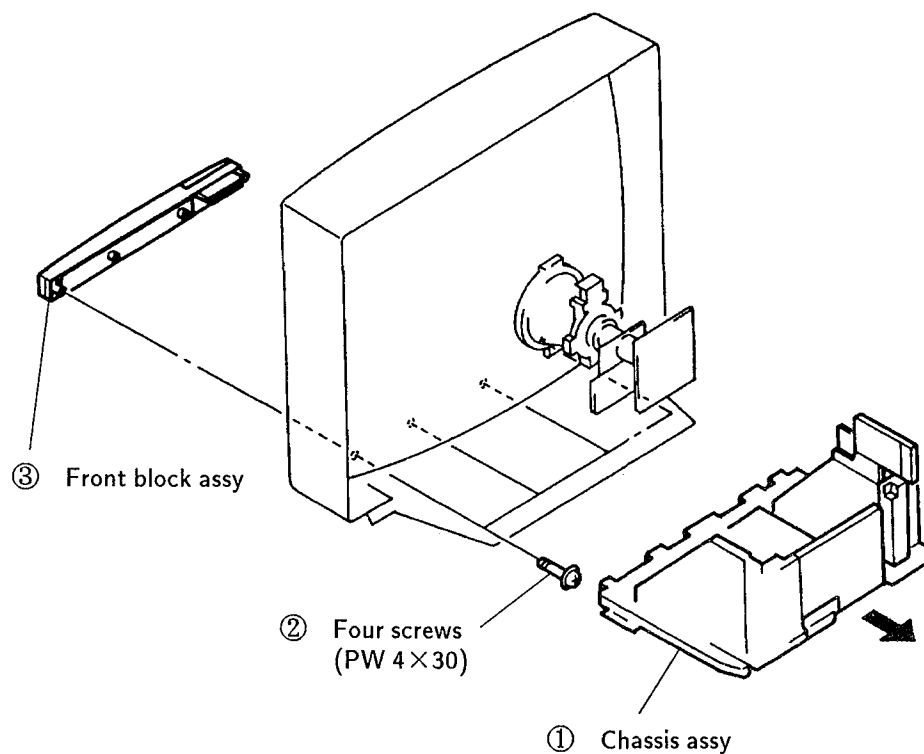
Symptom	Possible causes and remedies
No picture (screen not lit), no sound	<ul style="list-style-type: none"> <li>• Make sure POWER is switched on.</li> <li>• Check the power cord connection.</li> <li>• Check that the TV/VIDEO and VTR1-2-3 MDP controls are set correctly.</li> <li>• Make sure that the TV/CABLE BOX selector is set to TV.</li> </ul>
Poor or no picture (screen not lit), good sound	<ul style="list-style-type: none"> <li>• Adjust the picture using the VIDEO screen (pp. 46 – 49).</li> <li>• Check the antenna/cable connections.</li> </ul>
Good picture, no sound	<ul style="list-style-type: none"> <li>• Press VOLUME + on the TV or VOL + on the Remote Commander.</li> <li>• Press MUTE on the Remote Commander.</li> <li>• Check the MTS setting (p. 54).</li> <li>• Check that the TV/VIDEO and VTR1-2-3 MDP controls are set correctly.</li> <li>• Make sure SPEAKER is set to ON (p. 55).</li> </ul>
No color for color programs	<ul style="list-style-type: none"> <li>• Check the HUE and COLOR settings (pp. 46 – 47).</li> </ul>
Snow and noise only	<ul style="list-style-type: none"> <li>• Check that it is an active or correct channel.</li> <li>• Check the cable setting.</li> <li>• Check the ANT/AUX button setting.</li> <li>• Check antenna/cable connections.</li> </ul>
 Dotted lines or stripes	<p>This is often caused by local interference (for example, cars, neon signs and hairdryers). Adjust the telescopic aerial for minimum interference.</p>
 Double images or ghosts	<p>Reflections from nearby mountains or buildings often cause this problem. Connecting a highly directional outdoor antenna or a CATV cable may improve the picture.</p>
Try another channel. It could be station trouble.	

## SECTION 2 DISASSEMBLY

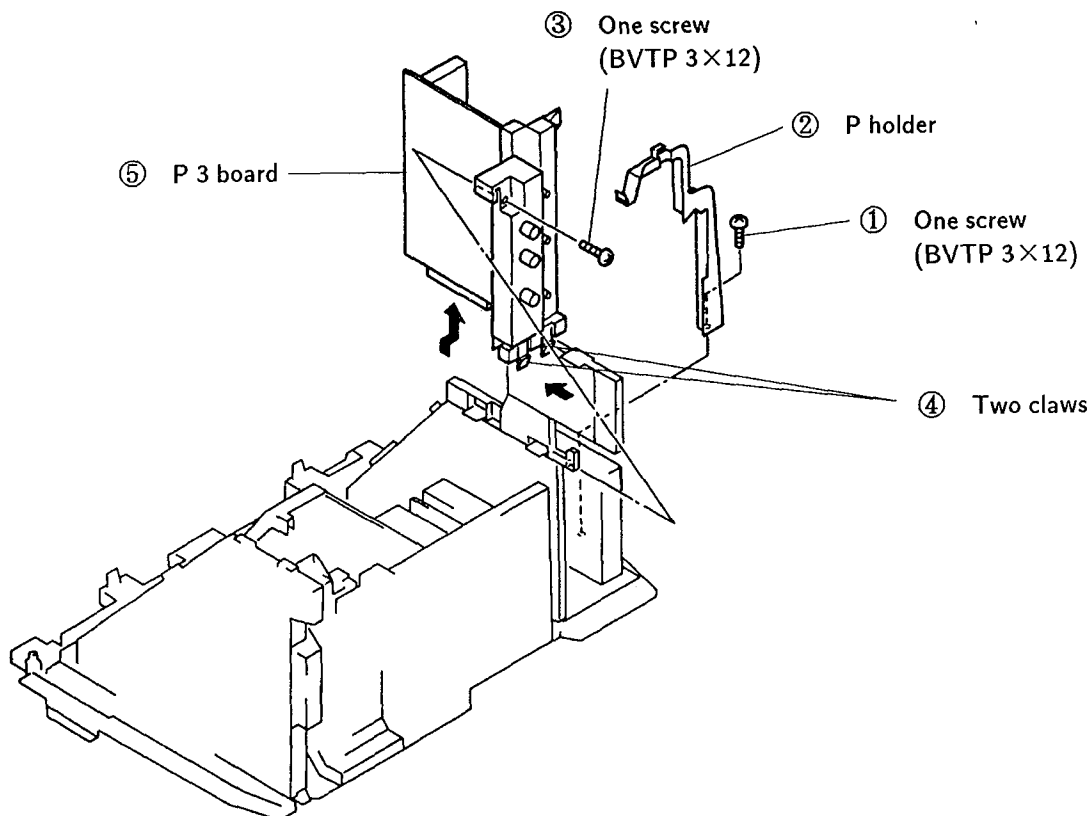
### 2-1. REAR COVER REMOVAL



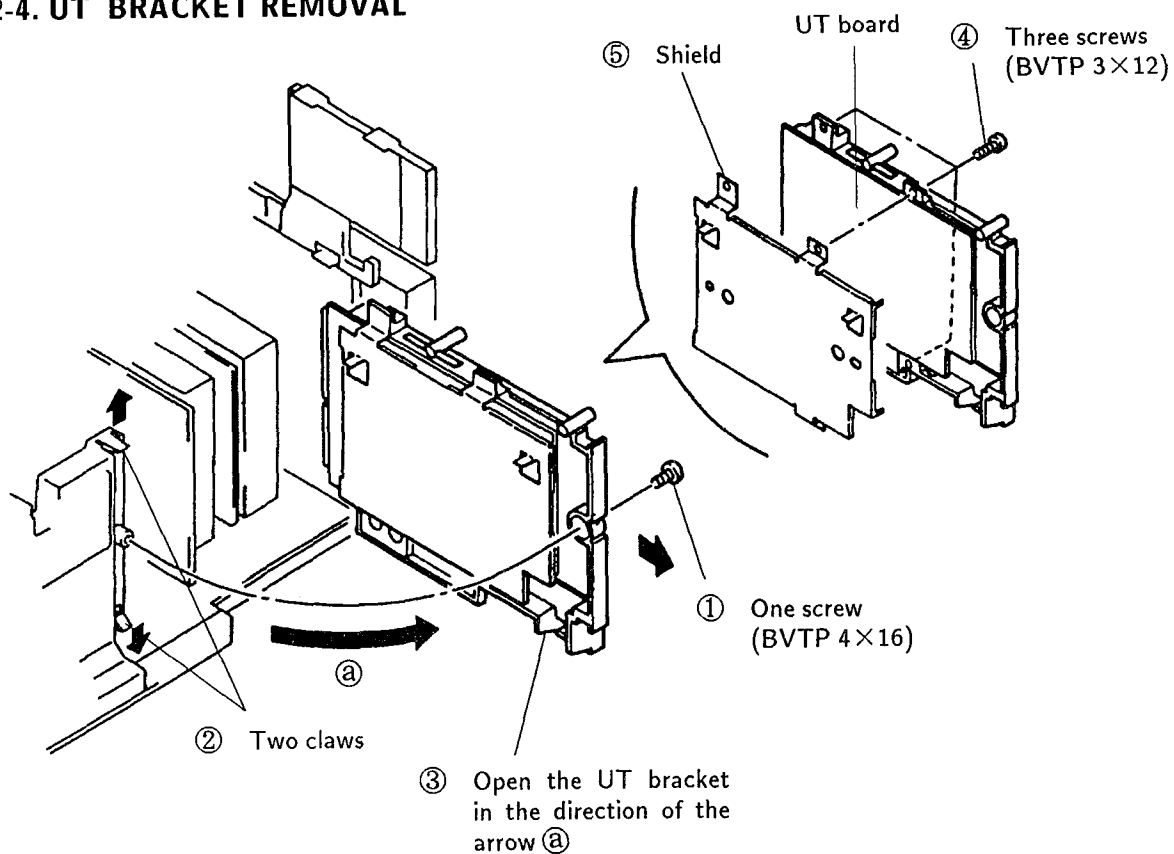
### 2-2. CHASSIS ASSY AND FRONT BLOCK ASSY REMOVAL



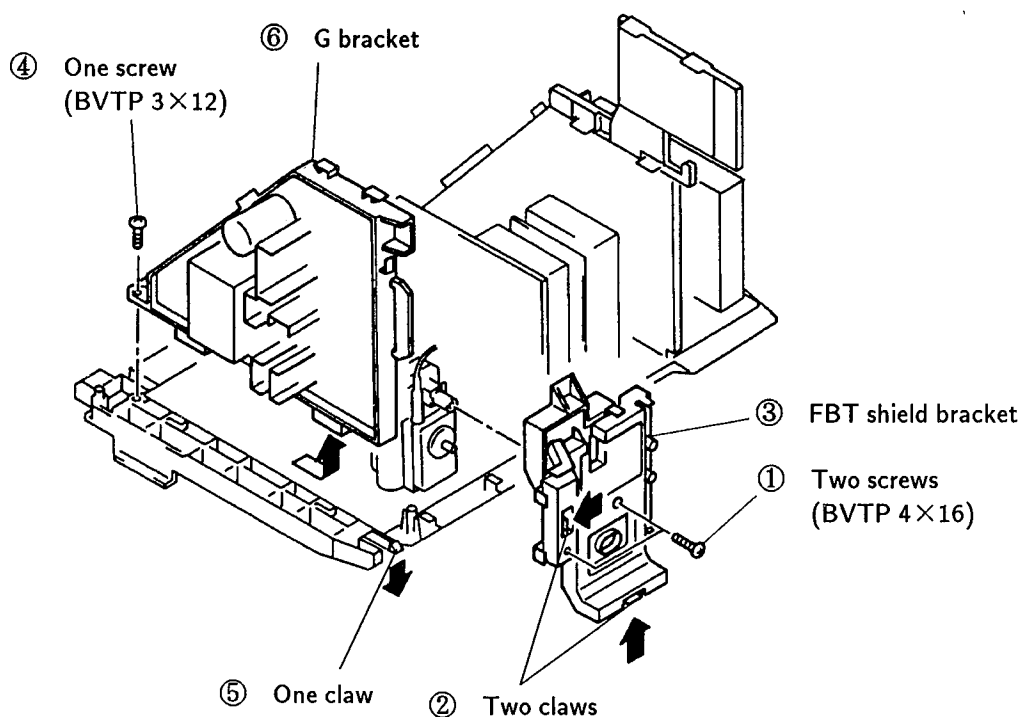
## 2-3. P3 BOARD REMOVAL



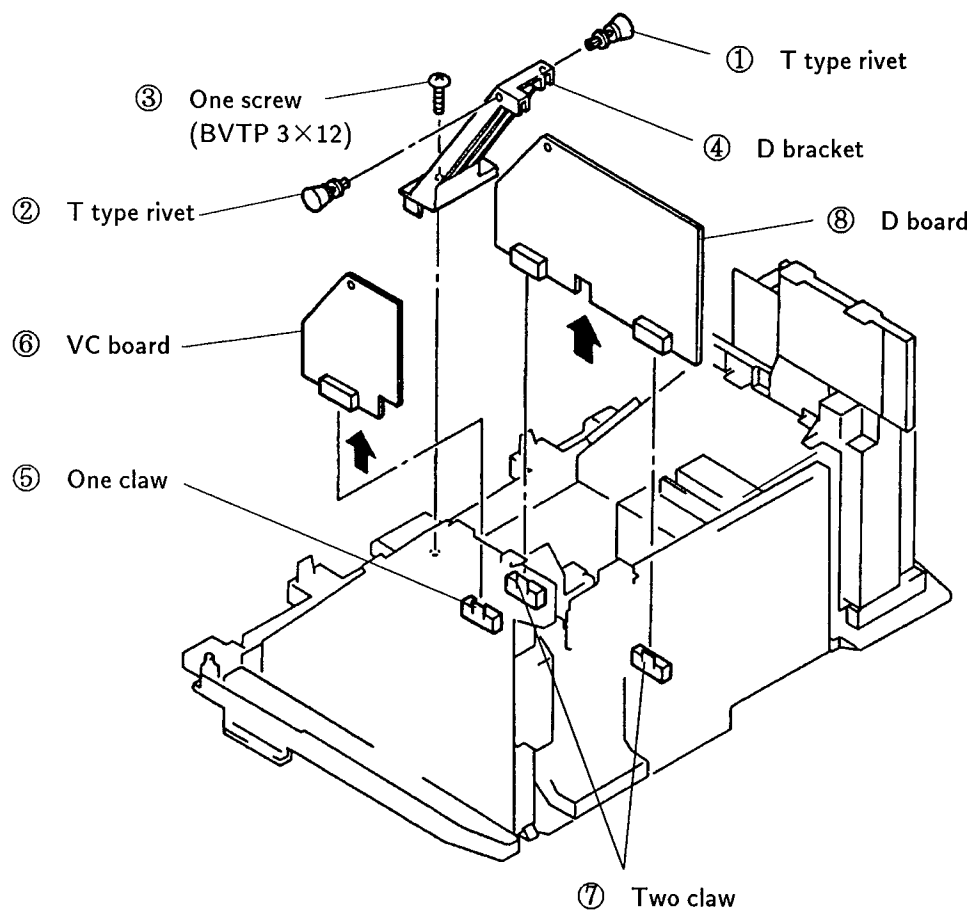
## 2-4. UT BRACKET REMOVAL



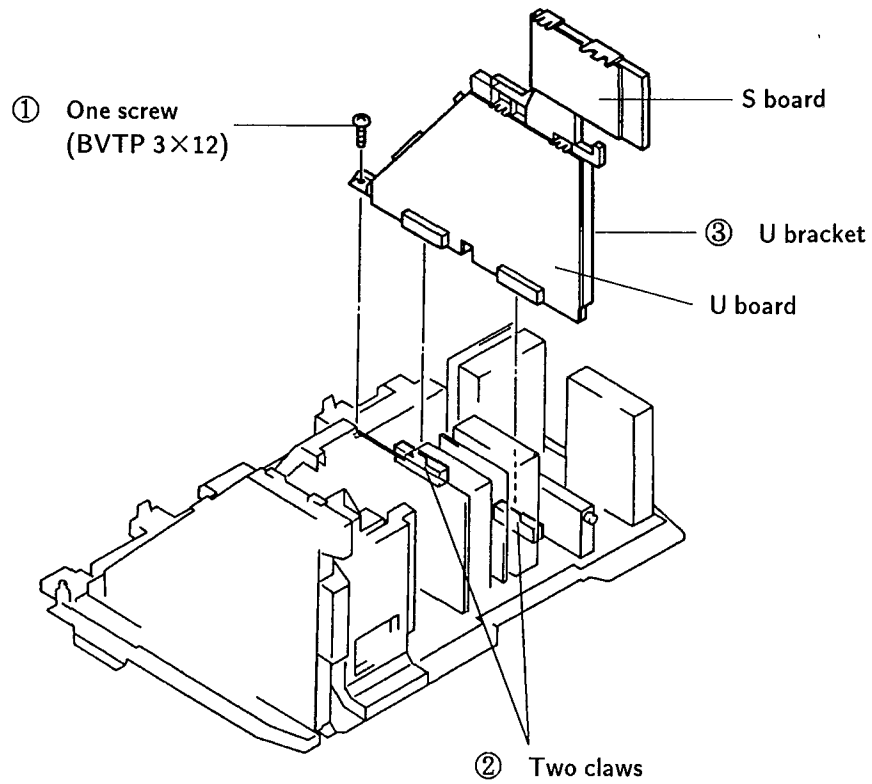
## 2-5. G BRACKET REMOVAL



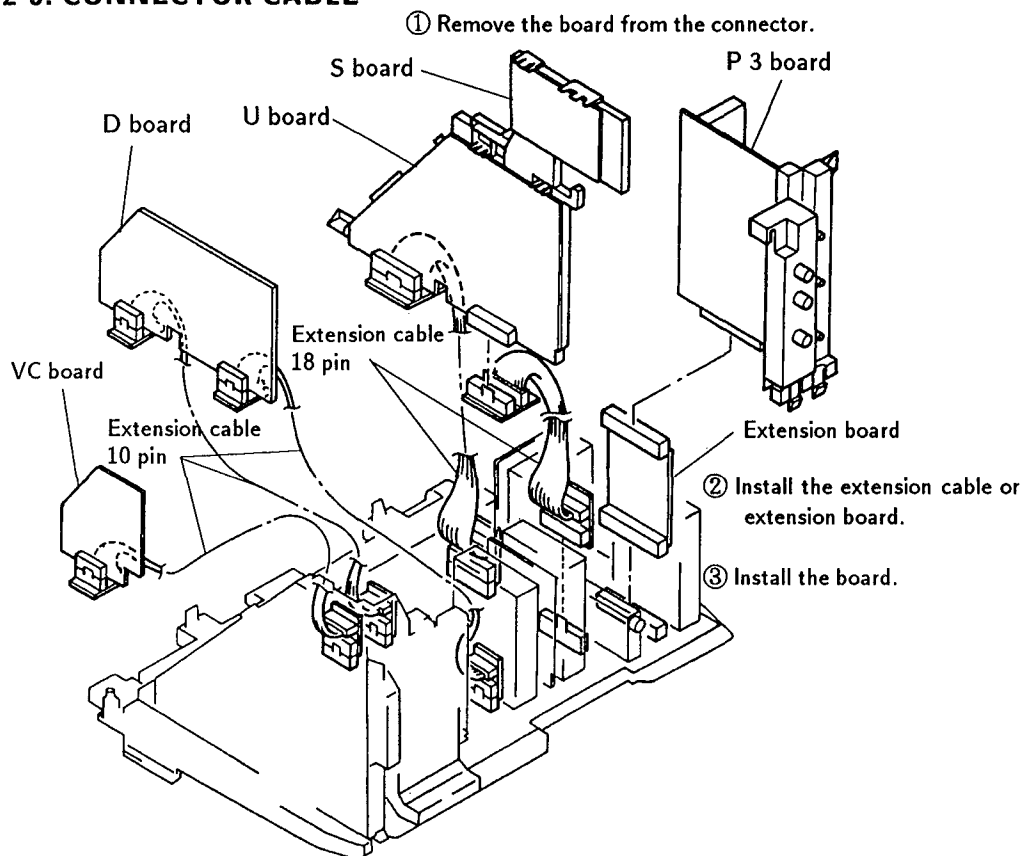
## 2-6. D BOARD REMOVAL



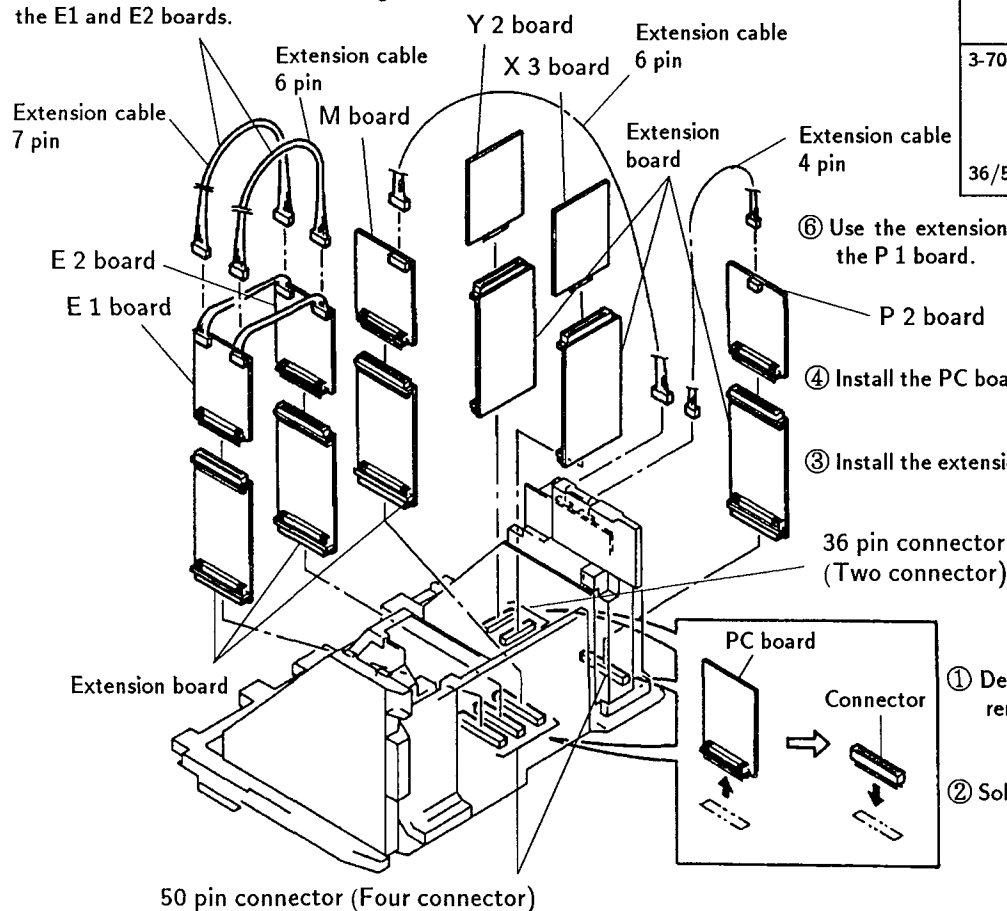
## 2-7. U BRACKET REMOVAL



## 2-8. CONNECTOR CABLE



⑤ Use the extension cable when checking the E1 and E2 boards.



Exterior	
Extension cable	
4 pin	1-941-891-33
6 pin	1-941-891-31
7 pin	1-941-891-32
18 pin	3-702-558-01
10 pin	3-702-557-01
36 pin connector	3-702-561-01
50 pin connector	3-702-560-01
36/50 pin	3-702-559-01
Extension board	

⑥ Use the extension cable when checking the P 1 board.

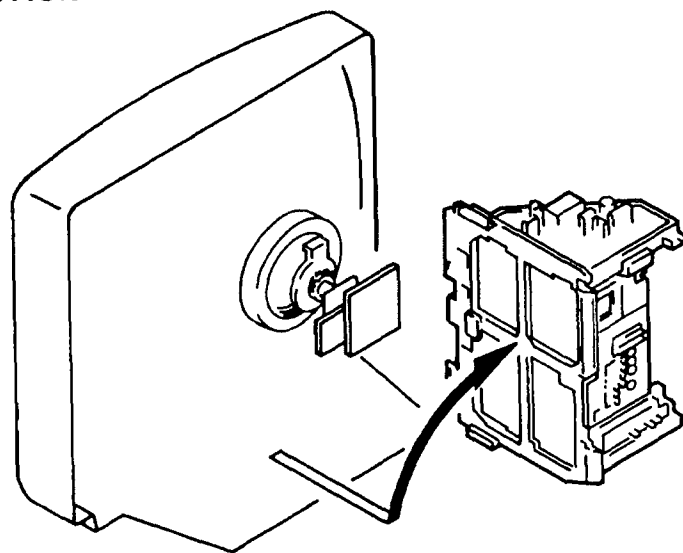
④ Install the PC board removed.

③ Install the extension board

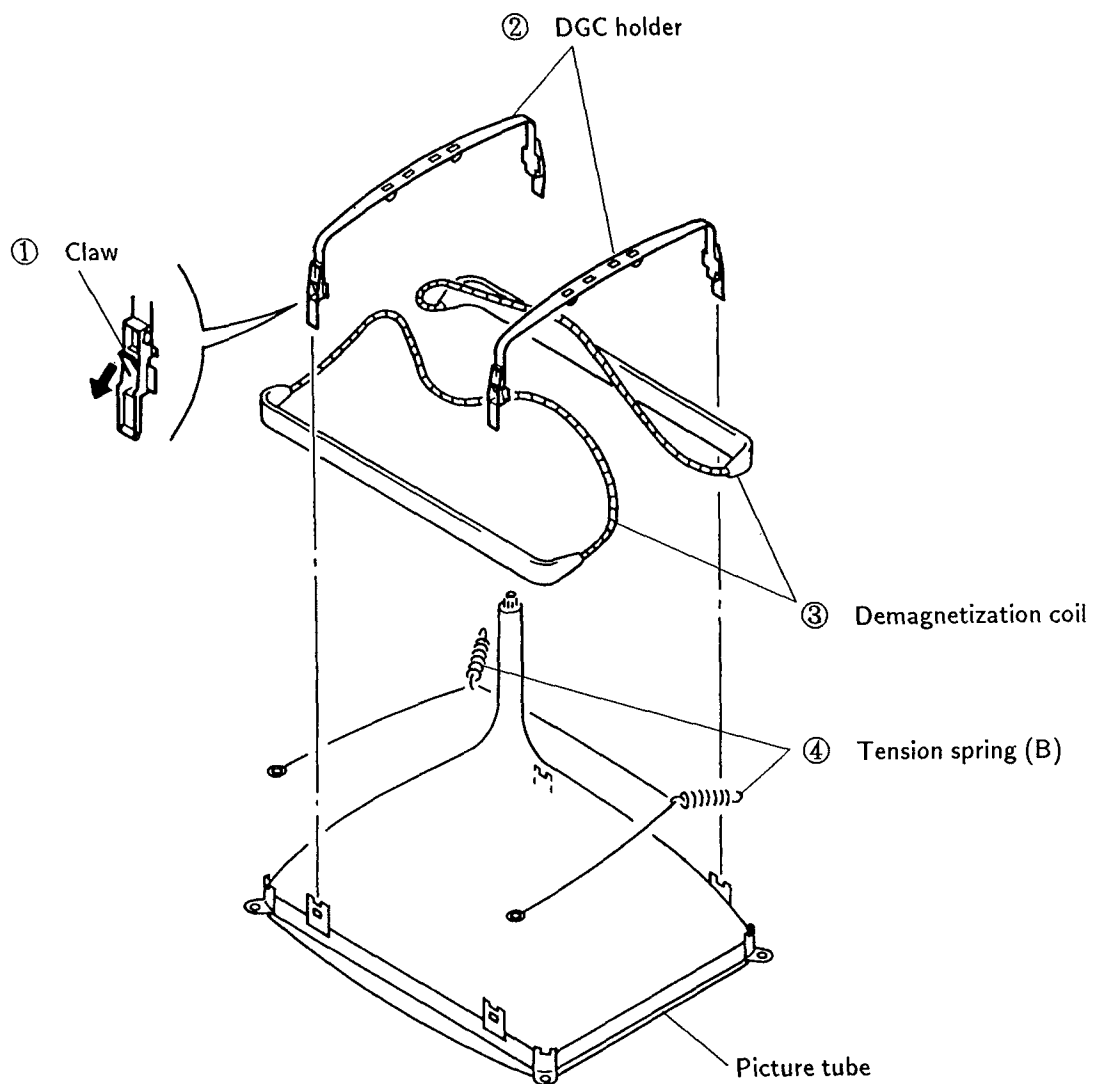
① De-solder the PC board and remove it.

② Solder the connector.

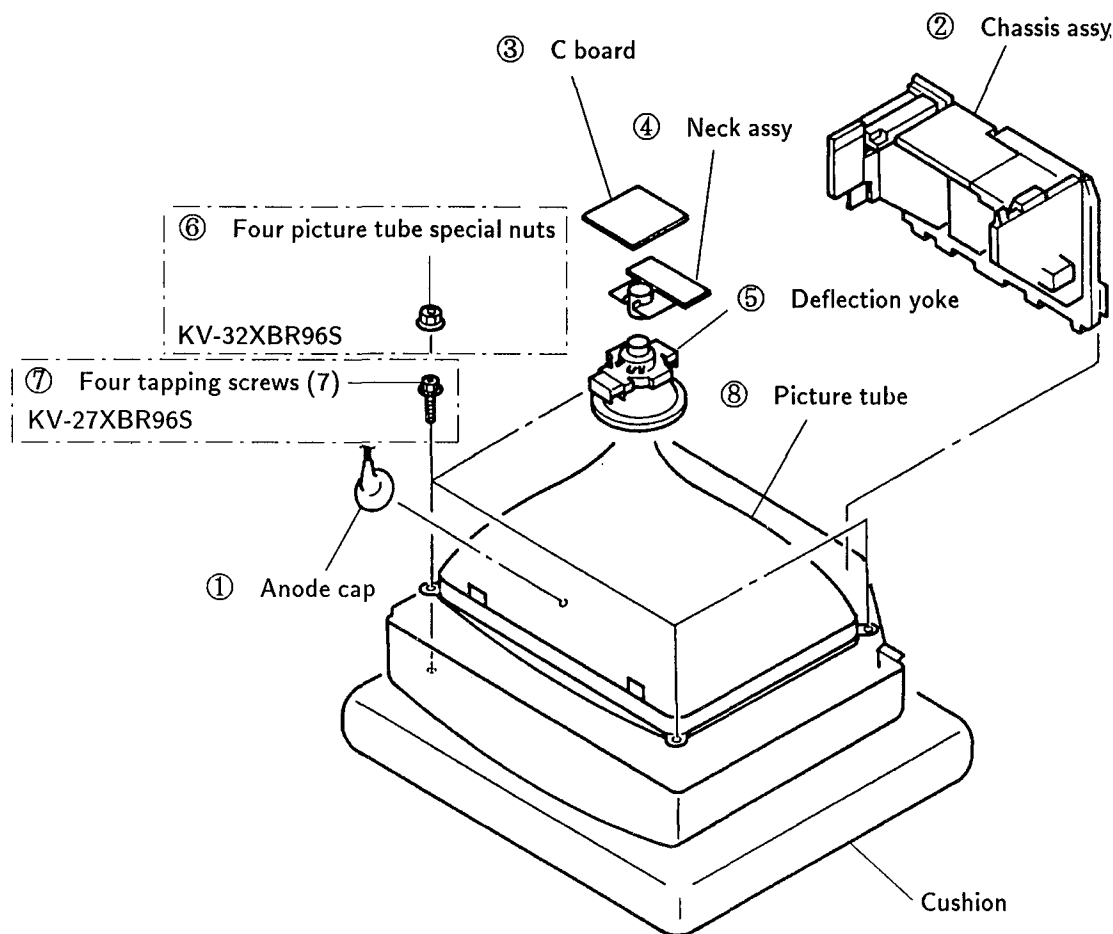
## 2-9. SERVICE POSITION



## 2-10. DEMAGNETIZATION COIL REMOVAL



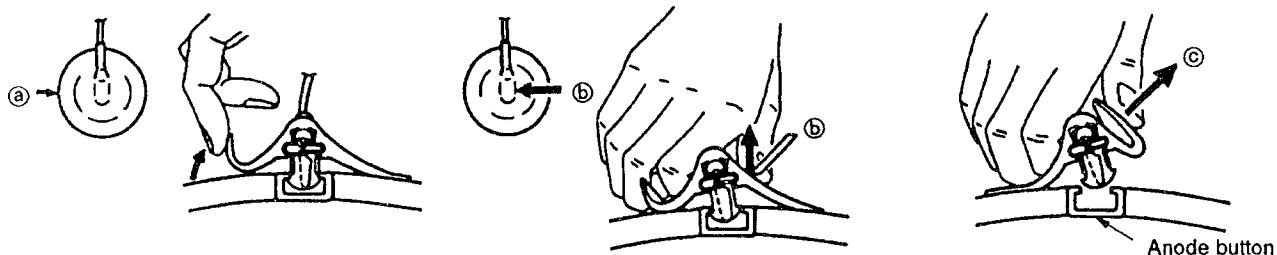
## 2-11. PICTURE TUBE REMOVAL



### • REMOVAL OF ANODE-CAP

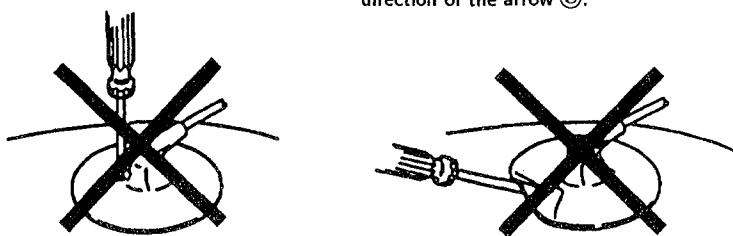
NOTE : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

### • REMOVING PROCEDURES



### • HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material!
- ② Don't press the rubber hardly not to hurt inside of anode-caps!  
A material fitting called as shatter-hook terminal is built in the rubber
- ③ Don't turn the foot of rubber over hardly!  
The shatter-hook terminal will stick out or hurt the rubber.



## SECTION 3

### SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted :

PICTURE control . . . . . RESET  
BRIGHTNESS control . . . . . center

#### Preparations :

- In order to reduce the influence of geomagnetism on the set's picture tube face it east or west.
- Switch on the set's power and degauss with the degausser.

#### 3-1. BEAM LANDING

1. Input the white signal with the pattern generator.  
Contrast } normal  
Brightness }
2. Position neck ass'y as shown in Fig 3-2.
3. Set the pattern generator raster signal to red.
4. Move the deflection yoke to the rear and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side.  
(See Figures 3-1 through 3-3.)
5. Move the deflection yoke forward and adjust so that entire screen is red. (See Figure 3-1.)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it.  
(See Figure 3-4.)

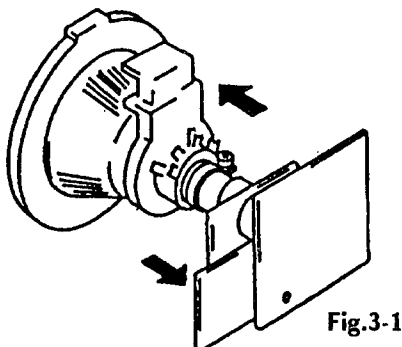


Fig.3-1

Perform the adjustments in order as follows :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

**Note :** Test Equipment Required.

1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

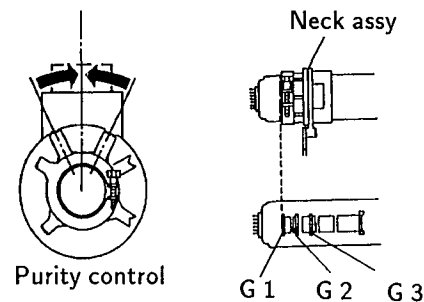


Fig.3-2

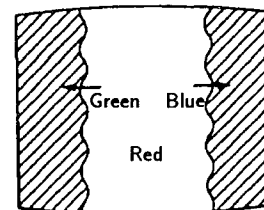


Fig.3-3

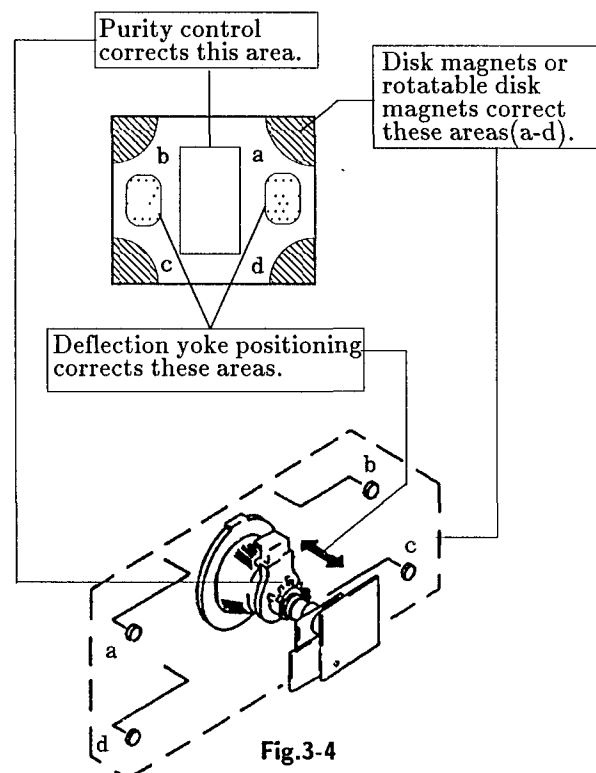


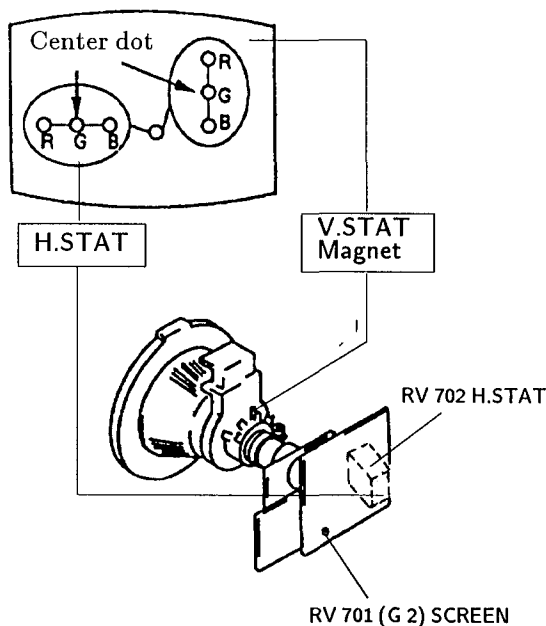
Fig.3-4

### 3-2. CONVERGENCE

#### Preparation :

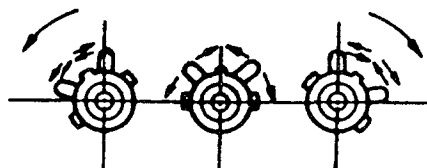
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

#### (1) Horizontal and Vertical Static Convergence

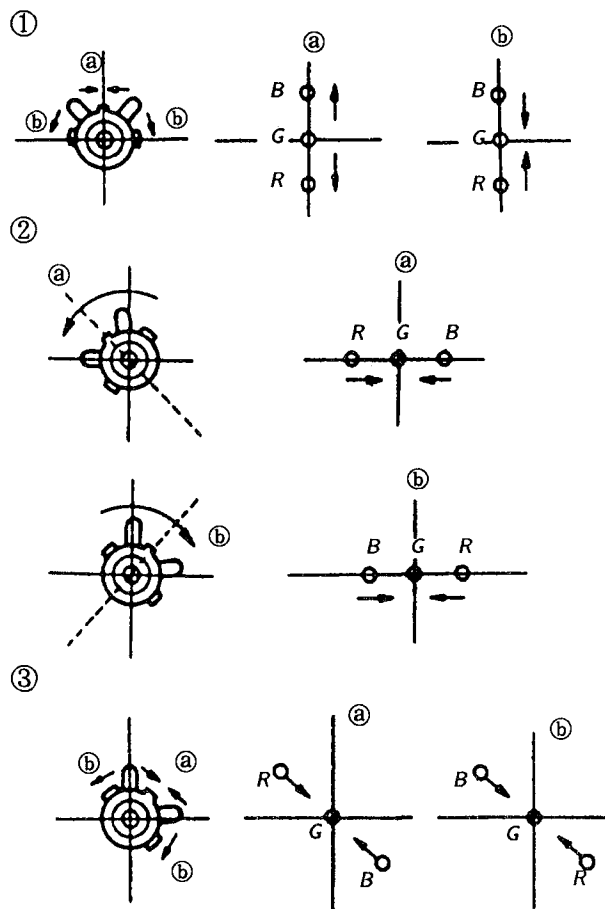


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V. STAT magnet in the manner given below.  
(In this case, the H.STAT variable resistor and the V. STAT magnet influence each other)

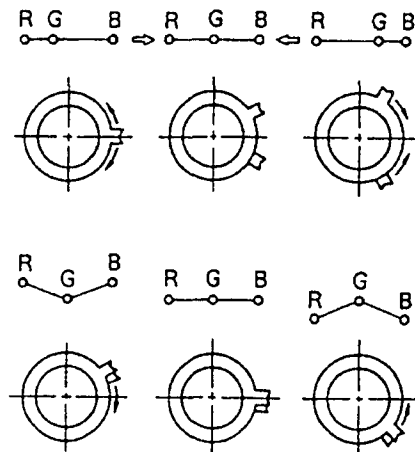
- Tilt the V. STAT magnet and adjust the static convergence by opening or closing the V. STAT magnet.



4. If the V. STAT magnet is moved in the direction of the ① and ② arrows, the red, green, and blue points move as shown below.



● Operation of BMC (Hexapole) Magnet

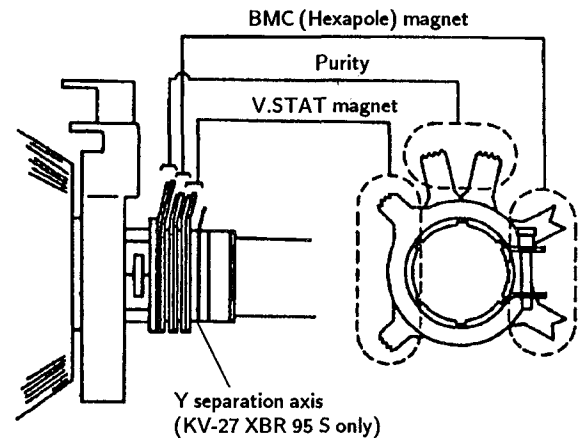
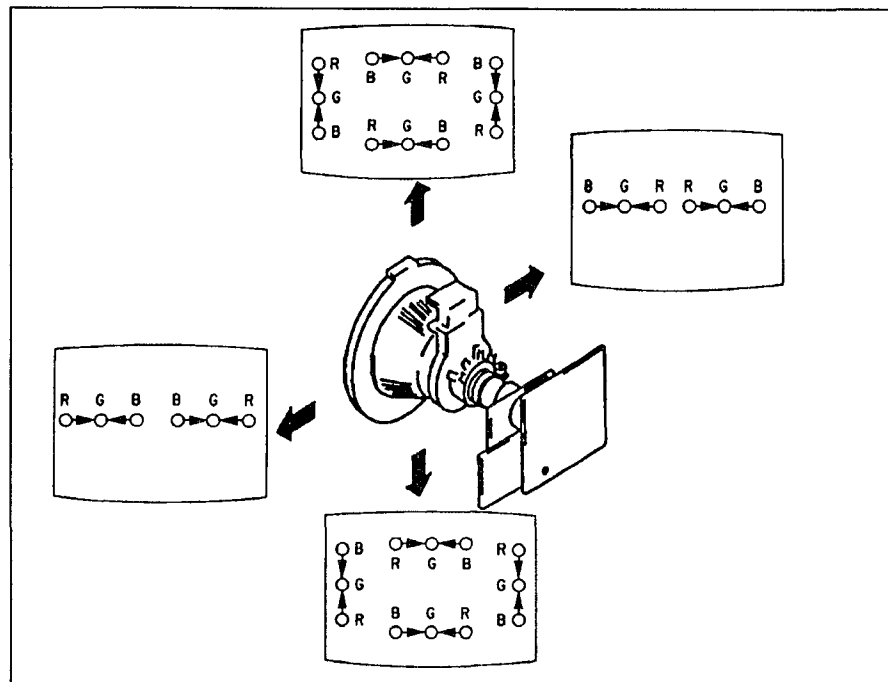


- The respective dot positions resulting from moving each magnet interact, so be sure to perform adjustment while tracking. Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).

(2) Dynamic Convergence Adjustment

Preparations :

- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.
1. Slightly loosen the deflection yoke screws.
  2. Remove the deflection yoke spacer.
  3. Move the deflection yoke as shown in the figure below and optimize the convergence.
  4. Tighten the deflection yoke screws.
  5. Install the deflection yoke spacer.



• Y separation axis correction magnet adjustment

1. Receive the cross-hatch signal, and adjust [PIX] to "MIN" and [BRT] to "standard".
2. Adjust the deflection yoke to the upright condition when it hits the CRT.
3. Adjust so that the Y separation axis correction magnet on the neck assembly is symmetrical at the top and bottom (open state).
4. Return the deflection yoke to its original position.

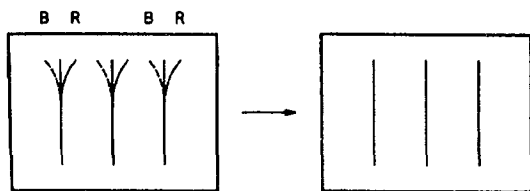
### (3) Dynamic Convergence Circuit Adjustment

- Set to Service Mode.
- Input a cross-hatch signal.
- Press **1** and **4** select an item of adjustments.
- Adjust **3** and **6** to the best picture.

ITEM	REFERENCE DATA	NAME REGISTER	
UYBO	39	VP	U. Y. BOW
LYBO	39	VP	L. Y. BOW
HAMP	26	VP	H. AMP
HTILT	36	VP	H. TILT
UCBO	20	VP	U. C. BOW
UTIL	44	VP	U. TILT
LCBO	31	VP	L. C. BOW
LTIL	63	VP	L. TILT
DCSH	19	VP	DC. SHIFT

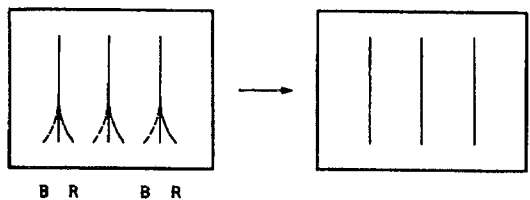
#### U. YBOW

Select UYBO with **1** and **4**



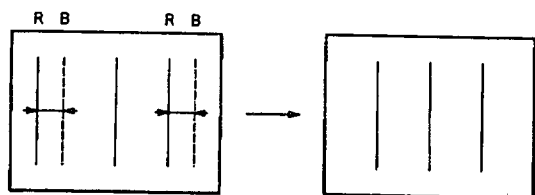
#### L. YBOW

Select LYBO with **1** and **4**



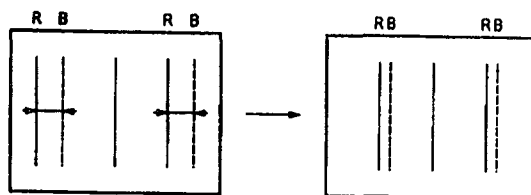
#### H. AMP

Select HAMP with **1** and **4**



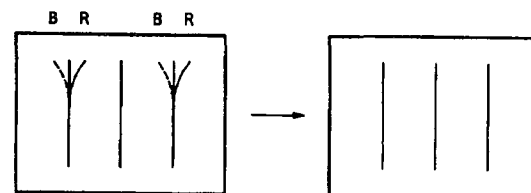
#### H. TILT

Select HTILT with **1** and **4**



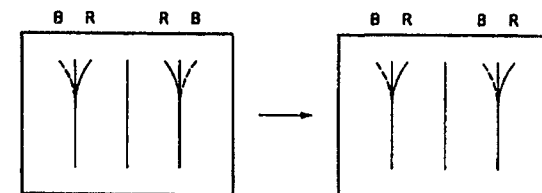
#### U. CBOW

Select UCBO with **1** and **4**



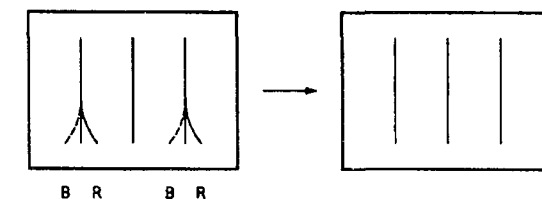
#### U. TILT

Select UTIL with **1** and **4**



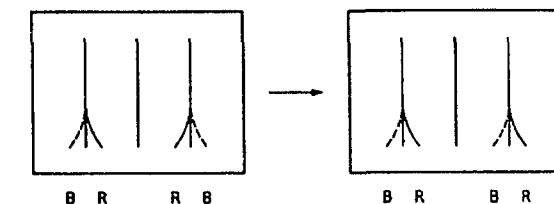
#### L. CBOW

Select LCBO with **1** and **4**

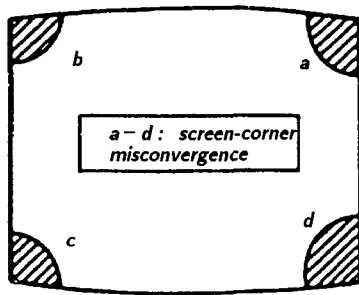


#### L. TILT

Select L. TIL with **1** and **4**

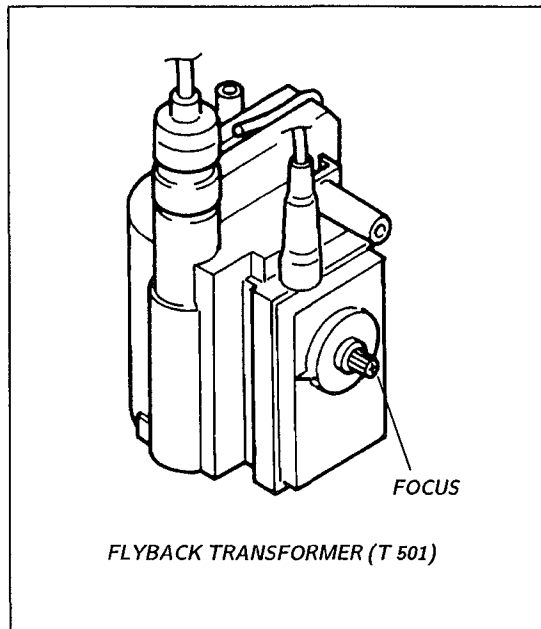
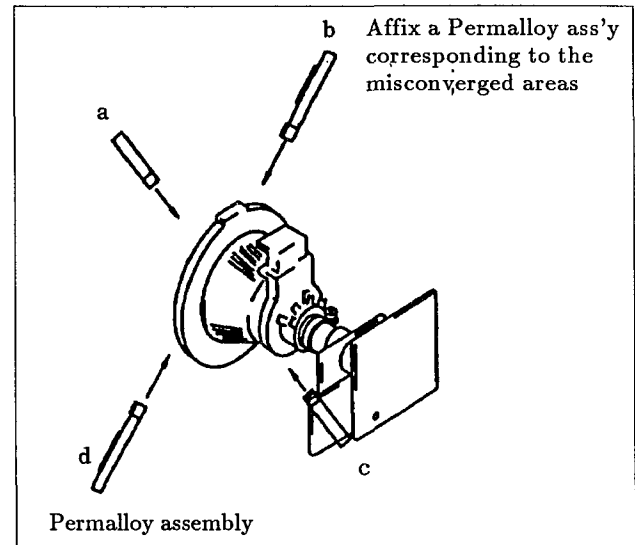


(4) Screen-corner Convergence



**3-3. FOCUS ADJUSTMENT**

Adjust FOCUS control on the flyback transformer for a best focus.



## a. AN ITEM OF ADJUSTMENT

ITEM	REFERENCE DATA	NAME REGISTER	
GAMP	19	VP	GREEN AMP.
BAMP	9	VP	BLUE AMP.
GCUT	8	VP	GREEN CUT OFF.
BCUT	6	VP	BLUE CUT OFF
SBRT	40	VP	BRIGHT

## b. METHOD OF CANCELLATION FROM SERVICE MODE

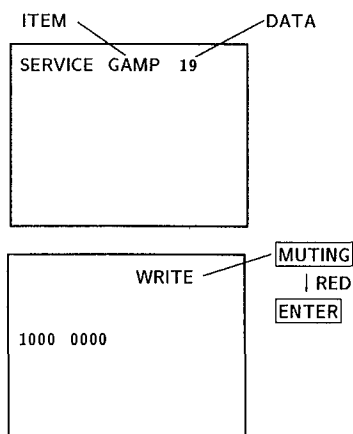
Set the standby condition (Press **POWER** button on the commander) in the next place, press **POWER** button again, hereupon it becomes TV mode.

## c. METHOD OF WRITE FOR MEMORY

- 1) Set to Service Mode.
- 2) Press **1** (UP) and **4** (DOWN), select an item of adjustments.
- 3) Press **MUTING** button indicate WRITE (RED) on screen.
- 4) Press **ENTER** button to write for memory.

## d. MEMORY WRITE CONFIRMATION METHOD

- 1) After adjustment, pull out the plug from AC outlet, and next place, plug in AC outlet again.
- 2) Turn the power switch ON and set to Service Mode.
- 3) Call the adjusted items again, confirm they were adjusted.



## 3-4. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

## 1. G 2 (SCREEN) ADJUSTMENT(RV 701)

- 1) Set the PICTURE and BRIGHTNESS to normal.
- 2) Confirm G 1 voltage is within  $30.0 \pm 5$  V.
- 3) Apply DC voltage of 180 V to the cathodes of R,G and B from DC stabilized power source.
- 4) While watching the picture, adjust the G2 control (RV 701) to the just the retrace line disappears.

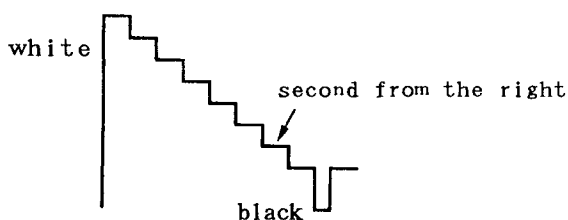
(Using the Remote Commander)

## 2. WHITE BALANCE ADJUSTMENTS

- 1) Set to service mode.
- 2) Press **STANDARD** to normal and if necessary "TRINITONE" set to "LOW" by **+** or **-**.
- 3) Input an entire white signal.
- 4) Set the PICTURE to minimum.
- 5) Select S BRT with **1** and **4**, and then set the level to minimum with **3** and **6**.
- 6) Select G CUT and B CUT with **1** and **4**.  
And adjust the level with **3** and **6** for the best white balance.
- 7) Set the PICTURE to maximum.
- 8) Select G AMP and B AMP with **1** and **4**, and adjust the level with **3** and **6** for the best white balance.
- 9) Write into the memory by pressing **MUTING** → then **ENTER**.

## 3. SUB BRIGHT ADJUSTMENT

- 1) Set to service mode.
- 2) Input a staircase signal of black and white from the pattern generator.
- 3) BRIGHTNESS ... RESET  
PICTURE ..... minimum
- 4) Select SBRT with **1** and **4**, and adjust SUB BRIGHT level with **3** and **6** so that the stripe second from the right is dimly lit.



## SECTION 4

### SAFETY RELATED ADJUSTMENTS

#### A BOARD

##### ☒ R565 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with ☒ on the schematic diagram).  
IC502, Q509, Q510, R565, R567, R568, R569

①

#### 1. Preparation before confirmation

- 1) Remove R651 on the G board and connect a variable resistor (RV1: about  $10k\Omega$ ) between pin ① of IC651 and B+ line.
- 2) Supply  $120 \pm 2.0V$  AC to with variable auto-transformer.

#### 2. Hold-down operation confirmation

- 1) Turn the POWER switch ON, and input an entirely white signals and adjust ABL current to  $1910 \pm 50\mu A$  (27 in.)  $1910 \pm 50\mu A$  (32 in.) with PICTURE and BRIGHT etc controls.
- 2) Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the minimum voltage is less than 147.0V DC (27 in.) 147.0V DC (32 in.) whereby the raster disappears during operation of hold-down circuit.

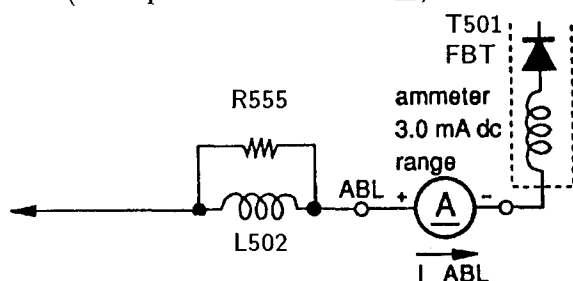
**NOTE:** When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

- 3) Turn the POWER switch ON, and input a dot signals and adjust ABL current to  $110 \pm 30\mu A$  (27 in.)  $110 \pm 30\mu A$  (32 in.) with PICTURE and BRIGHT etc controls.
- 4) Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the minimum voltage is lower than 148.5V DC (27 in.) 148.5V DC (32 in.) whereby the raster disappears during operation of hold-down circuit.

**NOTE:** When the Hold-down circuit starts operating, switch OFF the POWER of the set immediately.

#### 3. Hold-down readjustment

When step 2 is not satisfied, readjustment should be performed by altering the resistance value of R565 (a component marked with ☒).



#### A BOARD

##### ☒ R566 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with ☒ on the schematic diagram).  
IC502, IC651, Q509, Q510, D502, C531, R554, R566, R567, R568, R569, R651, R1506, T501

②

#### 1. Preparation before confirmation

- 1) Turn the POWER switch ON, and input an entirely white signals and set the PICTURE and BRIGHT controls to maximum.
- 2) Confirm that voltage of the check terminal of pin ② of A-0 connector is more than 127.0V DC (27 in.) 127.0V DC (32 in.) when the set is operating normally with  $120.0 \pm 2.0V$  AC supply.

#### 2. Hold-down operation confirmation

- 1) Turn the POWER switch ON, and input an entirely white signals and set the PICTURE and BRIGHT controls to maximum.
- 2) Apply DC voltage of over  $130 \pm 2.0V$  DC gradually to the check terminal of pin ② of A-0 connector via 1SS119 from the DC stabilized power source.  
Confirm that the minimum voltage is lower than 149.0V DC (27 in.) 149.0V DC (32 in.) whereby the raster disappears during operation of hold-down circuit.

**NOTE:** When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

#### 3. Hold-down readjustment

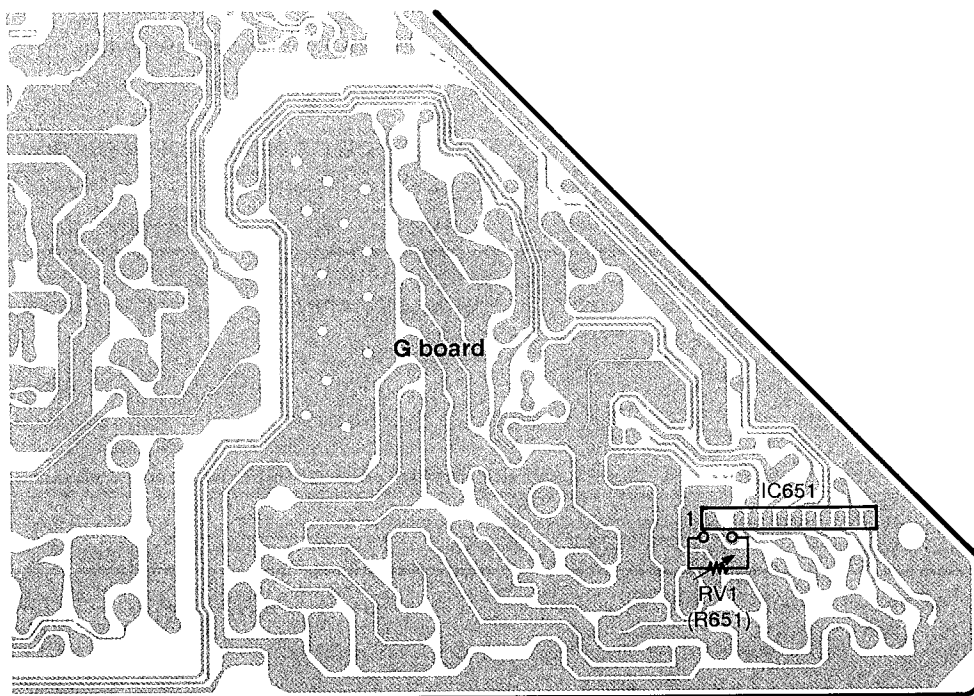
When step 2 is not satisfied, readjustment should be performed by altering the resistance value of R566 CARBON 1/4W (a component marked with ☒).

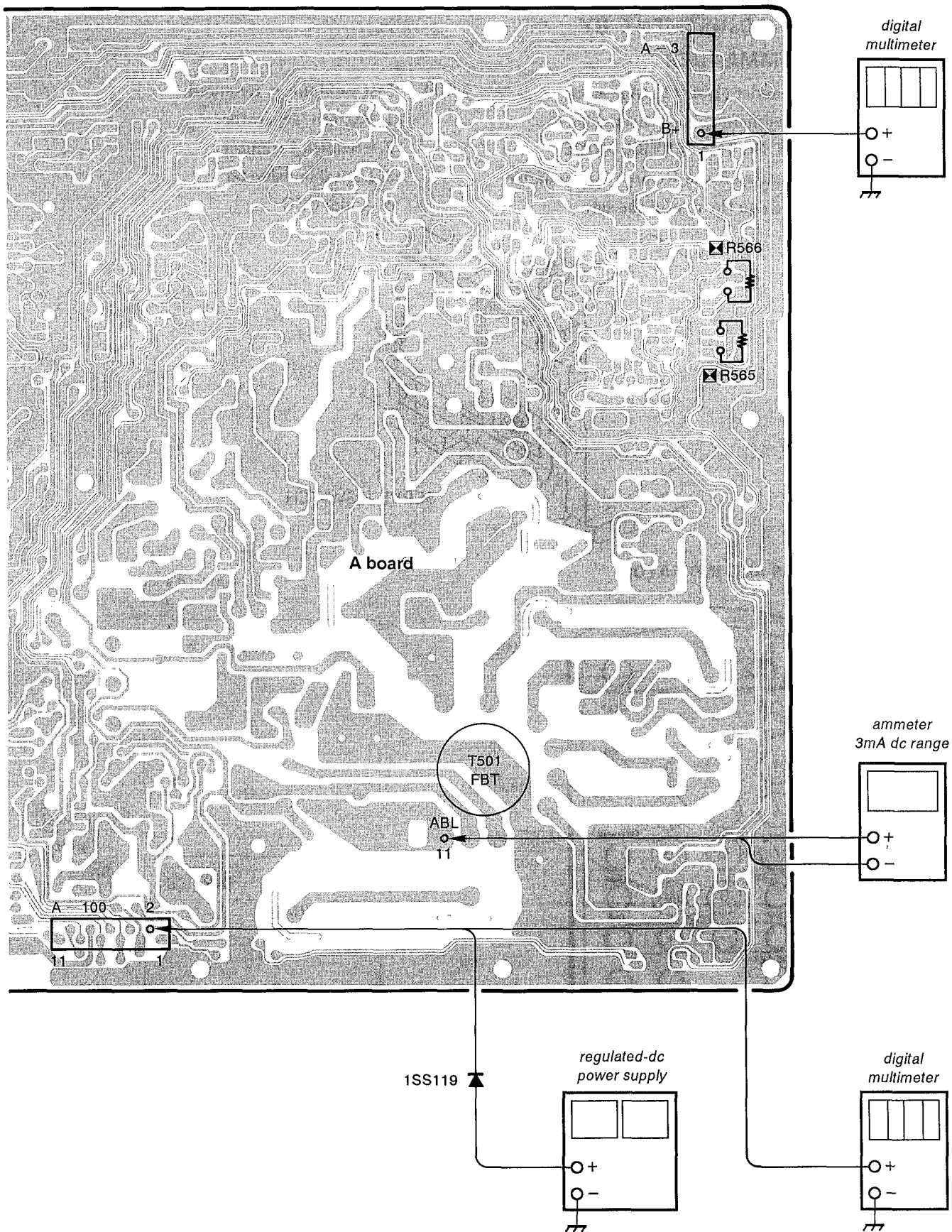
## G BOARD

### **B+ VOLTAGE CONFIRMATION**

The following adjustments should always be performed when replacing IC651 and R651.

- 1) Supply  $130 \pm 2\%$  V AC to with variable autotransformer.
- 2) Input an entirely monoscope signal.
- 3) Set the PICTURE control and the BRIGHT controls in to initial reset.
- 4) Confirm the voltage of A BOARD ① pin A-3 connector is less than 136.5V DC.
- 5) If step 4) is not satisfied, replace IC651 and R651 repeat above steps.





## SECTION 5 CIRCUIT ADJUSTMENTS

### 5-1. ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER

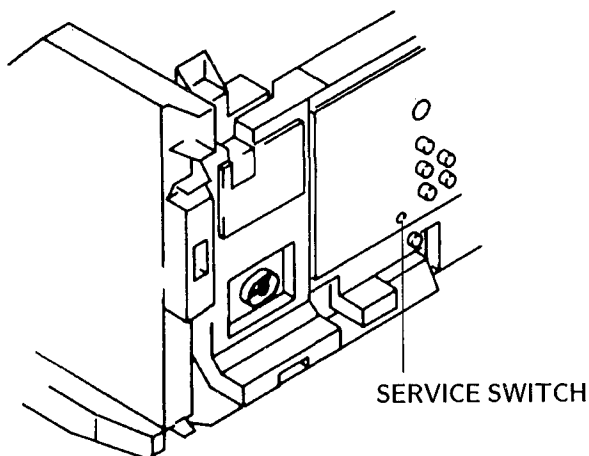
Use of Remote Commander (RM-Y114A) can be performed circuit adjustments about this model.

#### 1. METHOD OF SETTING THE SERVICE MODE

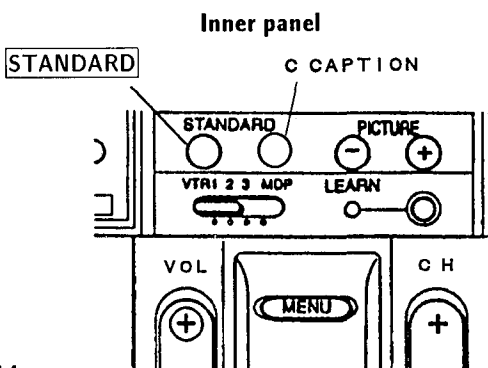
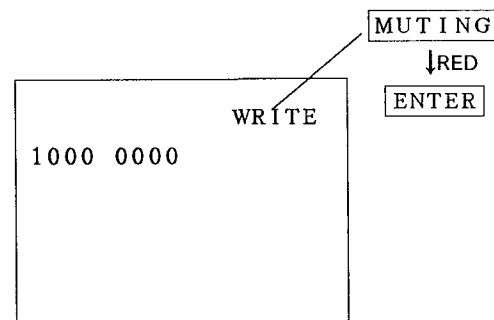
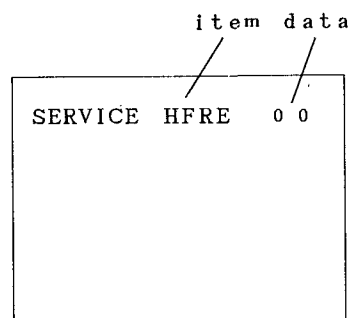
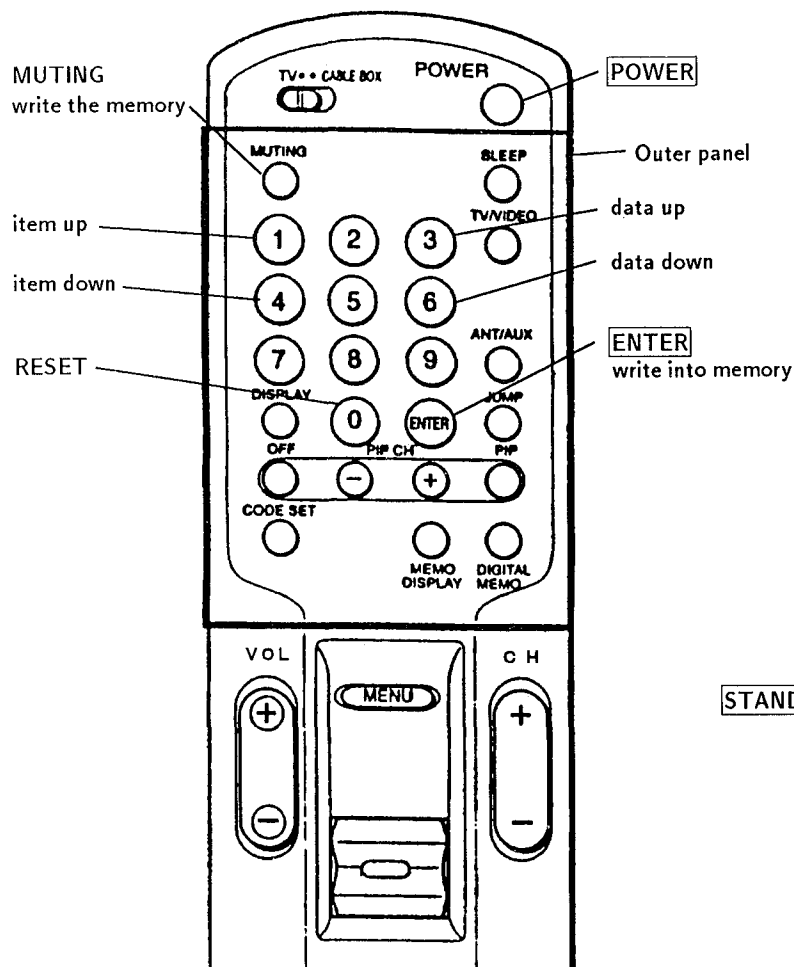
- 1) Press **POWER** button on the Remote Commander while pressing switch on the rear of the set.

NOTE : Test Equipment Required.

1. Pattern Generator
2. Frequency counter
3. Digital multimeter
4. Audio OSC



#### 2. ADJUST BUTTONS AND INDICATOR



## 3. AN ITEM OF ADJUSTMENT

ITEM	REFERENCE DATA	NAME REGISTER	
AFC	1	VP	AFC 1.0
HFRE	93	VP	H. FREQUENCE
VFRE	15	VP	V. FREQUENCE
VPOS	19	VP	V. SHIFT
VSIZ	32	VP	V. SIZE
VLIN	2	VP	V. LINEARITY
VSCO	3	VP	VS. CORRECTION
HPOS	9	VP	H. PHASE
HSIZ	25	VP	H. SIZE
PAMP	17	VP	PIN. AMP.
CPIN	4	VP	CORNER PIN
PPHA	8	VP	PIN. PHASE
VCOM	2	VP	V. COMP
GAMP	19	VP	GREEN AMP.
BAMP	9	VP	BLUE AMP.
GCUT	8	VP	GREEN CUT OFF.
BCUT	6	VP	BLUE CUT OFF
SPIX	40	VP	PICTURE
SHUE	29	VP	HUE
SCOL	30	VP	COLOR
SBRT	40	VP	BRIGHT
RGBP	28	VP	RGB PICTURE
SHAP	7		SHARPNESS
DISP	35		OUTPUT
VSMO	0	VP	VSMO
REF	2	VP	REF 1.0
ROFF	1	VP	OFF NR
GOFF	1	VP	OFF NG
BOFF	1	VP	OFF NB
ABLM	0	VP	ABLM
DRGB	1	VP	D RGB
YBOW	31	DE	Y BOW
VANG	35	DE	V. ANGLE
HTAP	31	DE	H. TRAP
TEST	0	AP	T
MPX	7	AP	ATT
FILO	31	AP	I1
DEEM	7	AP	I2
STEV	31	AP	OSC 1
SAPV	31	AP	OSC 2
PILO	7	AP	PILOT
SEP	31	AP	WIDE BAND
VD	7	AP	SPECTRAL
LVOL	0	AP	VOLUME-L
RVOL	0	AP	VOLUME-R
BASS	7	AP	BASS
TRE	7	AP	TREBLE

UYBO	39	DC	U.Y. BOW
LYBO	39	DC	L.Y. BOW
HAMP	26	DC	H.AMP
HTIL	36	DC	H TILT
UCBO	20	DC	U.C. BOW
UTIL	44	DC	U.TILT
LCBO	31	DC	L.C. BOW
LTIL	63	DC	L.TILT
DCSH	19	DC	DC. SHIFT
PHPO	34	PI	READ DELAY H
PVPO	8	PI	READ DELAY V
PLEV	14	PI	PICTURE LEVEL
PFCO	11	PI	FRAME COLOR
NRLE	30		NR LEVEL
DSPP	31		

Nothing change for KV-27XBR96S/32XBR96S

## 4. METHOD OF CANCELLATION FROM SERVICE MODE

Set the standby condition (Press **POWER** button on the commander) in the next place, press **POWER** button again, hereupon it becomes TV mode.

## 5. METHOD OF WRITE FOR MEMORY

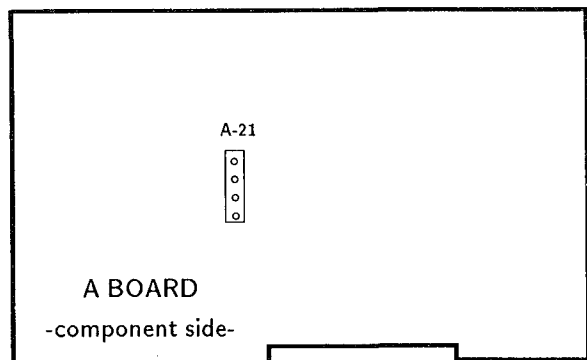
- 1) Set to Service Mode.
- 2) Press **1** (UP) and **4** (DOWN), select an item of adjustments.
- 3) Press **MUTING** button indicate WRITE (RED) on screen.
- 4) Press **ENTER** button to write for memory.

## 6. MEMORY WRITE CONFIRMATION METHOD

WRITE
1000 0000

- 1) After adjustment, pull out the plug from AC outlet, and next place, plug in AC outlet again.
- 2) Turn the power switch ON and set to Service Mode.
- 3) Call the adjusted items again, confirm they were adjusted.

## 5-2. A BOARD ADJUSTMENTS



### RF AGC ADJUSTMENT(IF BLOCK VR)

- 1) Input a color-bar signal.
- 2) Adjust AGC VR of TU 101 so that snow noise and cross-modulation disappear from the picture.
- 3) Confirm them at every channel.

### H.FREQUENCY ADJUSTMENT (HFRE)

- 1) Set to Service Mode.
- 2) Input a color-bar signal.
- 3) Connect a frequency counter to base of Q 507.
- 4) Call the item of AFC, set to 3 level (free run).
- 5) Select HFRE with **[1]** and **[4]**.
- 6) Adjust **[3]** and **[6]** to the  $15735 \pm 60$  Hz level.
- 7) Call the item of AFC again, adjust the level "01".
- 8) Write into the memory by pressing **[MUTING]** → then **[ENTER]**.

### V.FREQUENCY ADJUSTMENT (VFRE)

- 1) Set the Service Mode.
- 2) Input an off-air signal (VIDEO IN → no signal).
- 3) Connect the frequency counter across connector VDY-⊕ of DY-1 connector and ground.
- 4) Select VFRE with **[1]** and **[4]**.
- 5) Adjust **[3]** and **[6]** to the  $56 \pm 0.5$  Hz.
- 6) Write the memory by pressing **[MUTING]** → then **[ENTER]**.

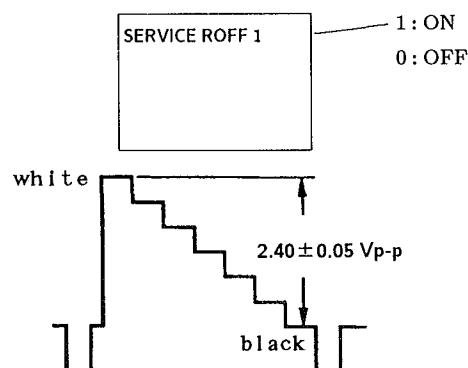
### SUB CONTRAST ADJUSTMENT (SPIX)

- 1) Set to Service Mode.
- 2) Input a color-bar signal. (75 IRE)
- 3) Set the conditions as follows.

PICTURE ..... MAX  
COLOR ..... MIN  
BRIGHT ..... MIN  
R OFF ..... ON  
G OFF ..... OFF  
B OFF ..... OFF

Press **[MENU]** and select VIDEO MENU → **[ ]** (L)  
(It becomes minimum).

Select **[3]** (ON) and **[6]** (OFF) with **[1]** and **[4]**.

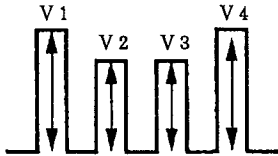


- 4) Connect an oscilloscope to TP 49 B of C board and ground.
- 5) Adjust **[3]** and **[6]** to the  $2.40 \pm 0.05$  Vp-p level by select-ing SPIX with **[1]** and **[4]**.
- 6) Write the memory by pressing **[MUTING]** → then **[ENTER]**.
- 7) Return the following back to normal after adjustment.

G OFF ..... ON  
B OFF ..... ON  
COLOR ..... CENTER  
BRIGHT ..... CENTER  
PICTURE ..... 80%

**SUB HUE, SUB COLOR ADJUSTMENT (SHUE, SCOL)**

- 1) Input a color-bar signal.
- 2) Press **STANDARD** to normal.
- 3) Set to Service Mode.
- 4) Connect an oscilloscope to TR 49 R of C board and ground.
- 5) Adjust **[3]** and **[4]** to the  $V1=V4$  and  $V2=V3$  by select to SHUE and SCOL with **[1]** and **[4]**.



- 6) Write into the memory by pressing **MUTING** → then **ENTER**.

**V.SIZE ADJUSTMENT (VSIZ)**

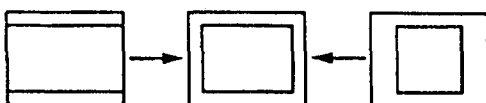
- 1) Set to Service Mode.
- 2) Press **STANDARD** to normal.
- 3) Input a cross-hatch signal.
- 4) Adjust **[3]** and **[6]** to the best vertical size by selecting VSIZ with **[1]** and **[4]**.
- 5) Write into the memory by pressing **MUTING** → then **ENTER**.

V SIZE (VSIZ)

**H.SIZE ADJUSTMENT (HSIZ)**

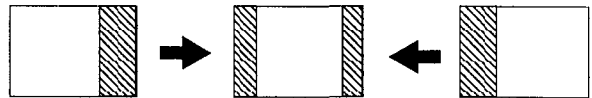
- 1) Input a cross-hatch signal.
- 2) Press **STANDARD** to normal.
- 3) Set to Service Mode.
- 4) Adjust **[3]** and **[6]** to best horizontal size by selecting HSIZ with **[1]** and **[4]**.
- 5) Write into the memory by pressing **MUTING** → then **ENTER**.

H SIZE (HSIZ)

**H.CENTER ADJUSTMENT (H POS)**

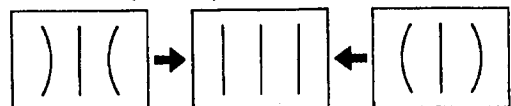
Note: Perform this adjustment after H.FREQUENCY ADJUSTMENT (HFRE).

- 1) Input a color bar signal.
- 2) Set the Service mode.
- 3) Select HSIZ with **[1]** and **[4]**.
- 4) Press **[6]** so that the Horizontal size set to min.
- 5) Adjust A-21 connector position so that both-size blanking width of the Raster should be same on the Scrnee.
- 6) Unplug Set then plug in Set.
- 7) Set to Service mode.
- 8) Select HPOS with **[1]** and **[4]**.
- 9) Adjust **[3]** and **[6]** so that the color bars center should be set to the CRT Screen center position.
- 10) White into the memory by the pressing **MUTING** → then **ENTER**.

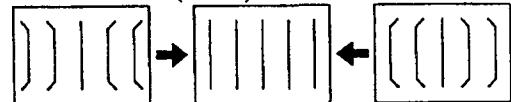

**PIN AMP (PAMP), CORNER PIN (CPIN) PIN PHASE (PPHA), H TRAPIZOID (HTRA) V LINEARITY (VLIN), V ANGLE (VANG), VS CORRECTION (VSCO), Y BOW (YBOW), V SHIFT (VPOS), AND V COMP (VCOM) ADJUSTMENTS**

- 1) Input a cross-hatch signal.
- 2) Press **STANDARD** to normal.
- 3) Set to Service Mode.
- 4) Select PAMP, CPIN, PPHA, H TRA, VPOS, VCOM, LVIN, VANG, VSCO and YBOW with **[1]** and **[4]**.
- 5) Adjust **[3]** and **[6]** to the best picture.
- 6) Write the memory by **MUTING** → **ENTER**.

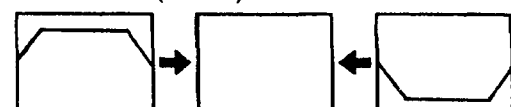
PIN AMP (PAMP)



CORNER PIN (CPIN)



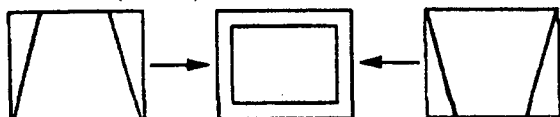
PIN PHASE (PPHA)



H TRAPIZOIDO (HTRA)



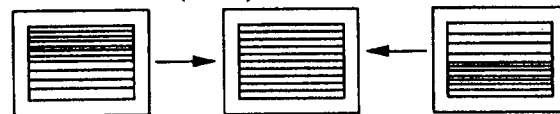
**V-SHIFT (VPOS)**



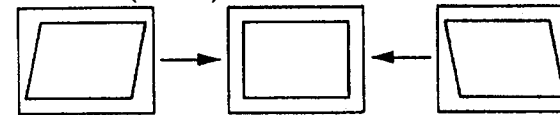
**V COMP (VCOM)**



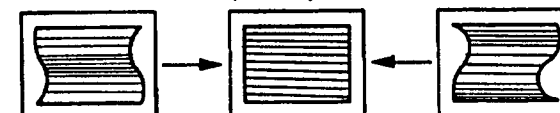
**V LINEARITY (VLIN)**



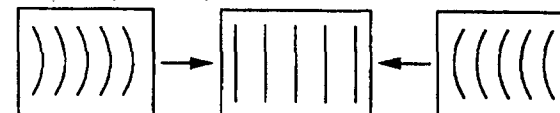
**V ANGLE (VANG)**



**VS CORRECTION (VSCO)**

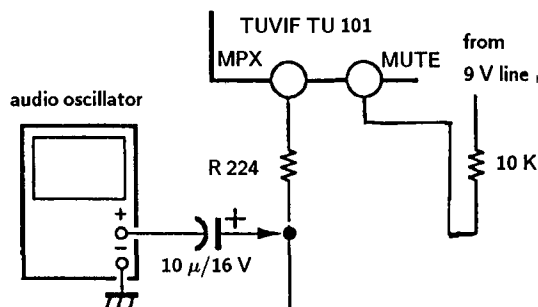


**Y BOW (Y BOW)**



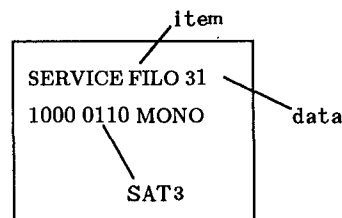
**FILTER ADJUSTMENT (MPX, FILO)**

- 1) Set to Service Mode.
- 2) Select to **TEST** with **[1]** and **[4]**, set the data to "1".  
Then select MPX and change data to "08".
- 3) Connect an audio oscillator to R224 using a capacitor (10μF/16V), set frequency to 62.936 kHz ± 0.1 kHz.  
And then, through the 10kΩ resistor, feed 9.0V into the mute of TUVIF TU 101.



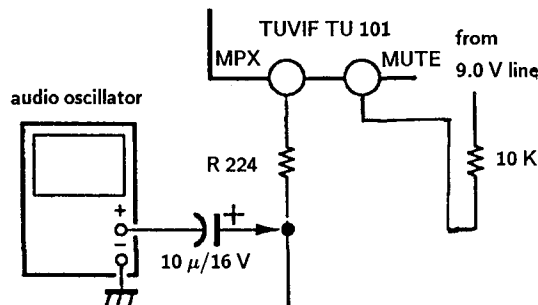
V 4 fh : SINE-WAVE 62.936 KHz ± 0.1 KHz  
LEVEL 3.0 Vp-p

- 4) Make the data "00" by selecting FILO with **[1]** and **[4]**. And then, send up the data gradually by pressing **[6]**. Set the data to D1 before SAT3 changing to 1 from 0.
- 5) Send up the data gradually. Set data D2 when SAT3 changes 0 from 1.
- 6) Adjust the data of FILO to  $\frac{D1 + D2}{2}$ .
- 7) Write into the memory by pressing **MUTING** → then **ENTER**.



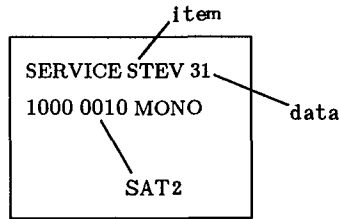
**ST VCO ADJUSTMENT (MPX, STEV)**

- 1) Set to Service Mode.
- 2) Select TEST with **[1]** and **[4]**, set the data to "1".  
And then press **MTS** to MONO.
- 3) Select MPX, set the data "8".
- 4) Connect an audio oscillator to R 224 using electrolytic capacitor (10μF/16V) and apply the frequency Vsr. Then, apply DC voltage to mute of TUVIF TU 101 using 10kΩ connect to 9.0 V line.



Vfh : SINE-WAVE 15.734 KHz ± 0.1 KHz  
LEVEL 0.28 Vp-p

- 5) Select STEV with **[1]** and **[4]**, set the data to "00" with **[6]**. And then, send up the data gradually. Set the data to D1 before SAT2 changes from 0 to 1.
- 6) Send up data gradually, set the data to D2 when SAT2 changes 1 from 0.
- 7) Adjust the data of STEV to
- 8) Write into the memory by pressing **MUTING** → then **ENTER**.

**MPX IN LEVEL ADJUSTMENT (MPX)**

- 1) Set to Service Mode.
- 2) Select TEST with [1] and [4], set the data to "0" with [6]. And then press [MTS] to MONO.
- 3) Select MPX with [1] and [4], set the data to "08" with [3] and [6].
- 4) Write into the memory by pressing [MUTING] → then [ENTER].

**PILOT CANCEL ADJUSTMENT (PILO)**

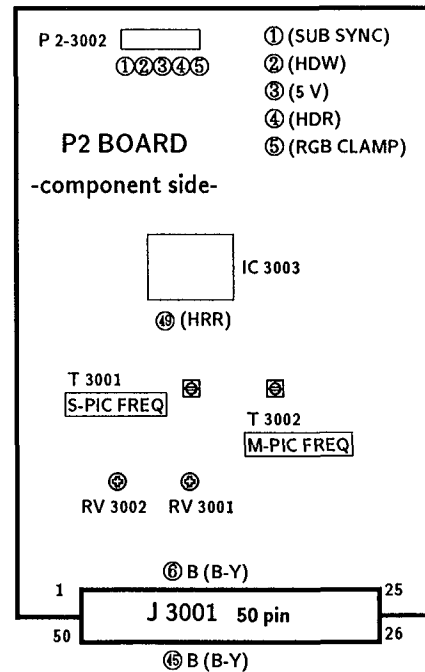
- 1) Set to the Service Mode.
- 2) Select PILO with [1] and [4], set the data to "08" with [3] and [6].
- 3) Write into the memory by pressing [MUTING] → then [ENTER].

**SAP VCO f<sub>s</sub> ADJUSTMENT (SAPV)**

- 1) Set to Service Mode.
- 2) Input a stereo broadcast signal with SAP.
- 3) Select TEST with [1] and [4], set the data to "0". And then, press [MTS] to MAIN.
- 4) Connect a digital multimeter to TP-1(DBX). This voltage reading will equal V 1.
- 5) Press MTS to SAP and this voltage will equal V 2.
- 6) Select SAPV with [1] and [4], adjust [3] and [6] so that  $V 2 = V 1 \pm 0.03 \text{ VDC}$ .
- 7) Write the memory by [MUTING] → [ENTER].

**SEPARATION ADJUSTMENT (SEP)**

- 1) Set to Service Mode.
- 2) Press [MTS] to MAIN and receive a monoral broadcast signal.  
In the next step, receive a stereo broadcast signal.
- 3) Select SEP and VD with [1] and [4], adjust [3] and [6] so that a clear stereo sound is effected.

**5-3. P2 BOARD ADJUSTMENTS****MAIN-PICTURE FREQUENCY (T 3002)**

- 1) Set PIP mode.
- 2) Connect a frequency counter to Pin ⑪ (HDW) of J 3001.
- 3) Connect a frequency counter to Pin ④⑨ or ⑤⑩ (HRR) of IC 3003 or Pin ⑤ (RGB CLAMP) of P2-3002.
- 4) Short the circuit between Pin ④ (HDR) of P2-3002 and Pin ③ (5V) of P2-3002.
- 5) Turn T3002 CLK (P) for the following frequency at Pin ④⑨ or ⑤⑩ (HRR) of IC 3003 or at Pin ⑤ (RGB CLAMP) of P2-3002.

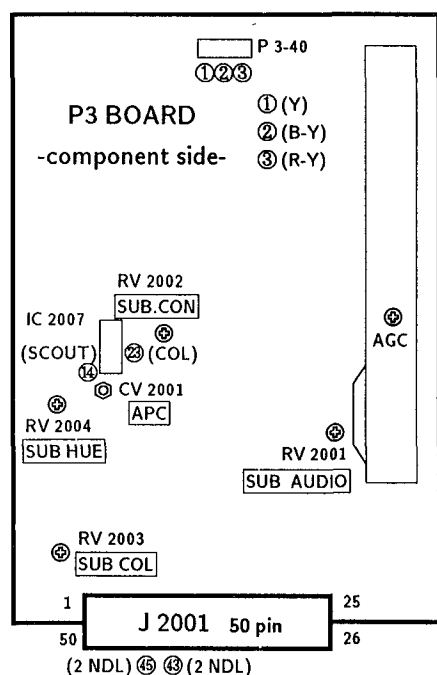
15.734 kHz  $\pm$  10 Hz

**SUB-PICTURE FREQUENCY (T 3001)**

- 1) Set PIP mode.
- 2) Connect a frequency counter to Pin ⑪ (HDW) of J 3001.
- 3) Connect a frequency counter to Pin ④⑨ or ⑤⑩ (HRR) of IC 3003 or Pin ⑤ (RGB CLAMP) of P2-3002.
- 4) Short the circuit between Pin ① (SUB SYNC) of P 2-3002 and Pin ③ (5 V) of P 2-3002.
- 5) Turn T 3001 CLK (C) for the following frequency at Pin ② (HDW) of P 2-3002.

15.734 kHz  $\pm$  10 Hz

## 5-4. P3 BOARD ADJUSTMENTS



### RF AGC ADJUSTMENT (IF BLOCK VR)

- 1) Input a color-bar signal.
- 2) Set to PICTURE IN PICTURE mode.
- 3) Adjust AGC VR of TU 2001 so that snow noise and cross-modulation disappear from the picture.
- 4) Confirm them at every channel.

### SUB PICTURE SOUND VOLUME LEVEL (SUB AUDIO) ADJUSTMENT (RV2001)

- 1) Receive an audio signal of 400 Hz. (100% mod.)
- 2) Adjust RV 2001 for the following level at Pin ④③ (2 NDR) or Pin ④⑤ (2 NDL) of J 2001.

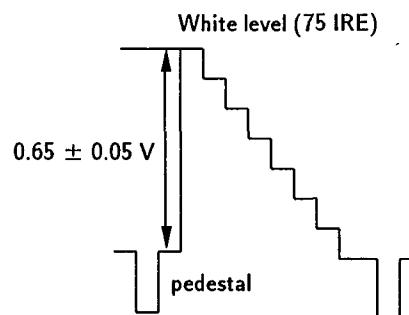
$$500 \text{ mVrms} \pm 2 \text{ dB}$$

### SUB CONT ADJUSTMENT (RV 2002)

- 1) Obtain the color bar signal on the sub-screen.
- 2) Observe at Pin ① (Y OUT) of P 3-42 on an oscilloscope.

Adjust RV 2002 for the following level between the white level and pedestal one.

$$0.65 \pm 0.05 \text{ Vp-p}$$



### SUB COLOR ADJUSTMENT (RV 2003)

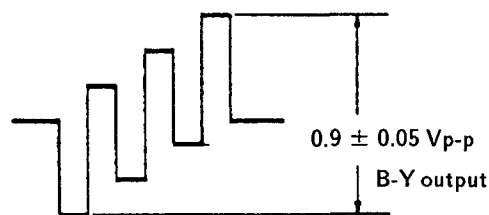
- 1) Obtain the color bar signal on the sub-screen in the mode of PIP size 1/4.
- 2) Reset color.
- 3) Adjust RV 2003 for the following level, observing an oscilloscope connected to Pin ② (B-Y) of P3-40 (Fig. 1)

$$0.9 \pm 0.05 \text{ Vp-p (B-Y)}$$

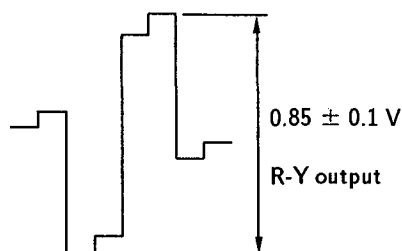
- 4) Adjust RV 2003 for the following level, observing an oscilloscope connected to Pin ③ (R-Y) of P3-40 (Fig. 2)

$$0.85 \pm 0.1 \text{ Vp-p (R-Y)}$$

- 5) Adjust tracking between sub color and sub hue.



(Fig. 1)

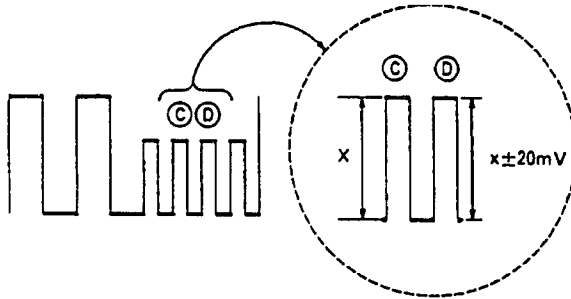


(Fig. 2)

**SUB HUE ADJUSTMENT(RV 2004)**

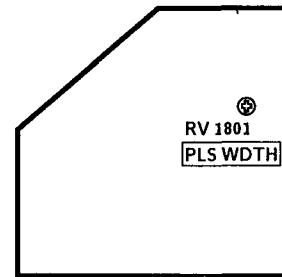
- 1) Obtain the color bar signal on the sub-screen in the mode of PIP size 1/4.
- 2) Reset hue.
- 3) Observe the signal at Pin ⑥ or Pin ④⑤ of J 3001 on P 2 board on an oscilloscope and make adjustment to obtain the following level.

$$D : X \pm 20 \text{ mV}$$

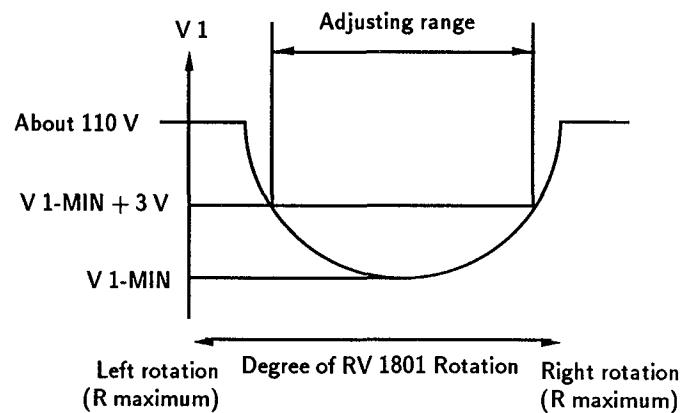
**APC ADJUSTMENT(CV 2001)**

Connect Pin ②③ (COL) of IC 2007 to ground and connect a frequency counter to Pin ⑭ (SCOUT) to obtain the following level.

$$3579545 \pm 40 \text{ Hz}$$

**5-5. VC BOARD ADJUSTMENT****DRIVE PULSE PHASE ADJUSTMENT(RV 1801)**

- 1) While measuring the voltage V 1 at both edges of C 1809, rotate RV 1801 so that it becomes minimum. The adjusting range is from (the voltage at which V 1 becomes minimum) V 1 MIN to 3 V, which means, adjust to between V 1 MIN to V 1 MIN + 3 V.

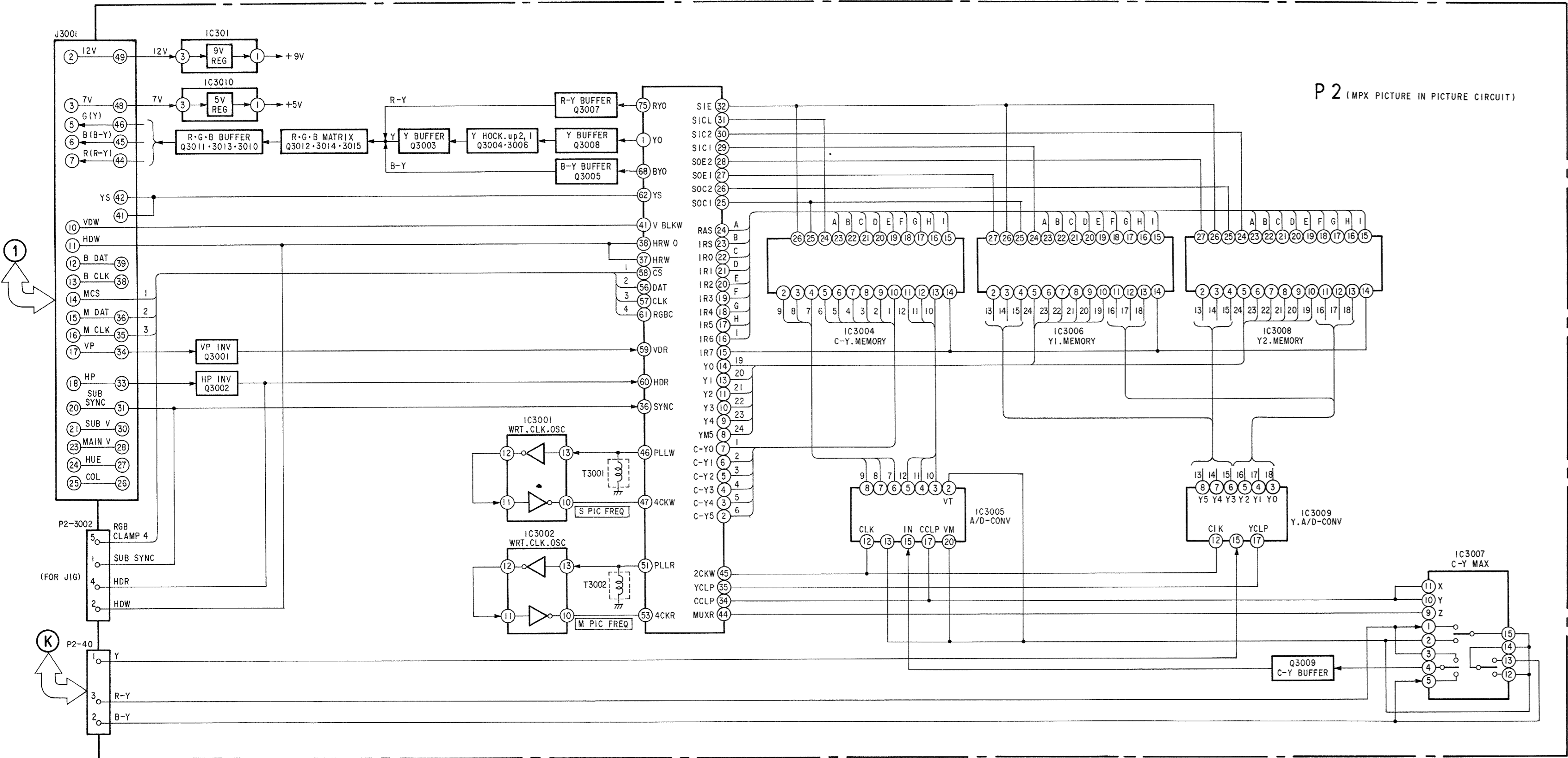


## MEMO

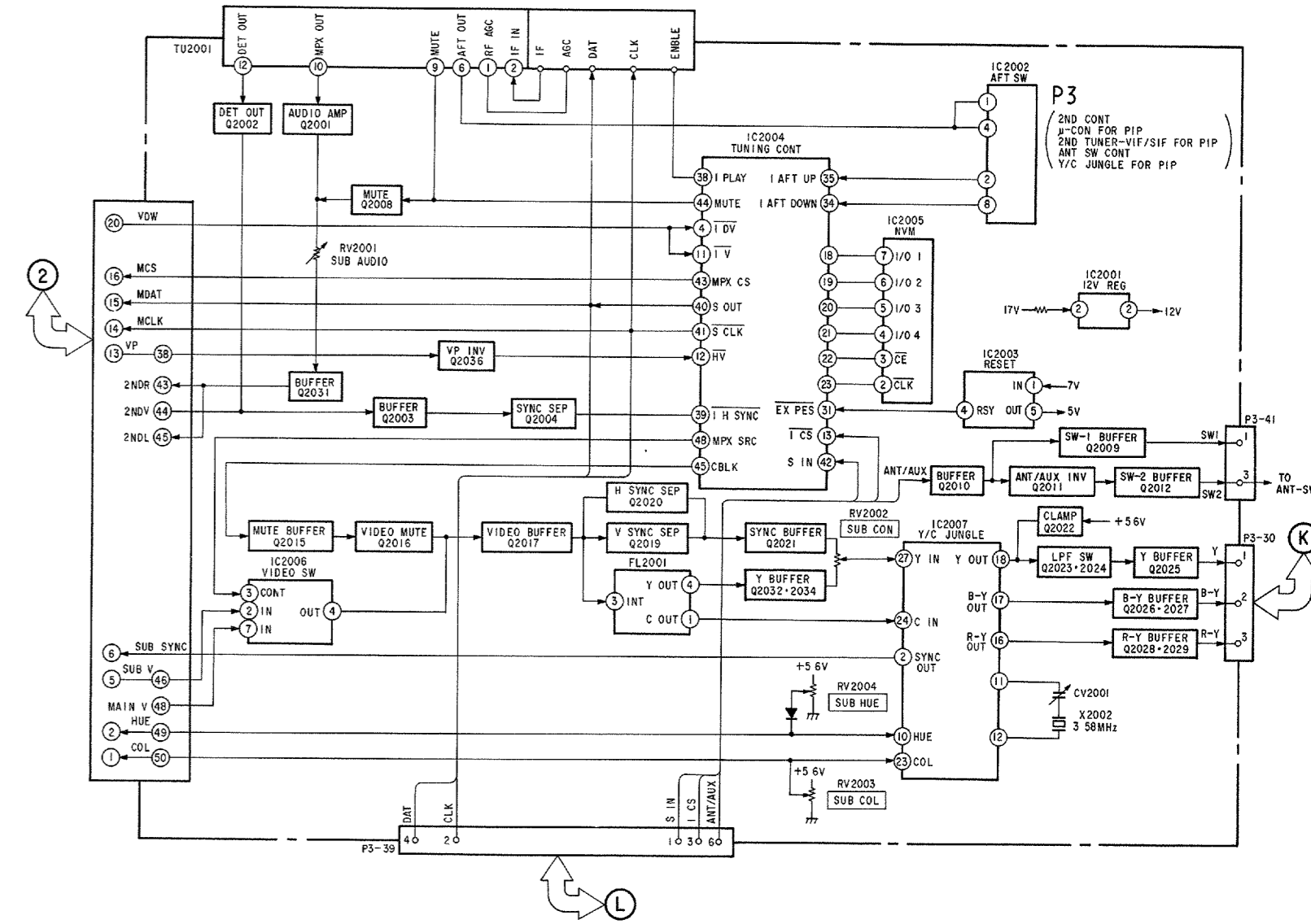
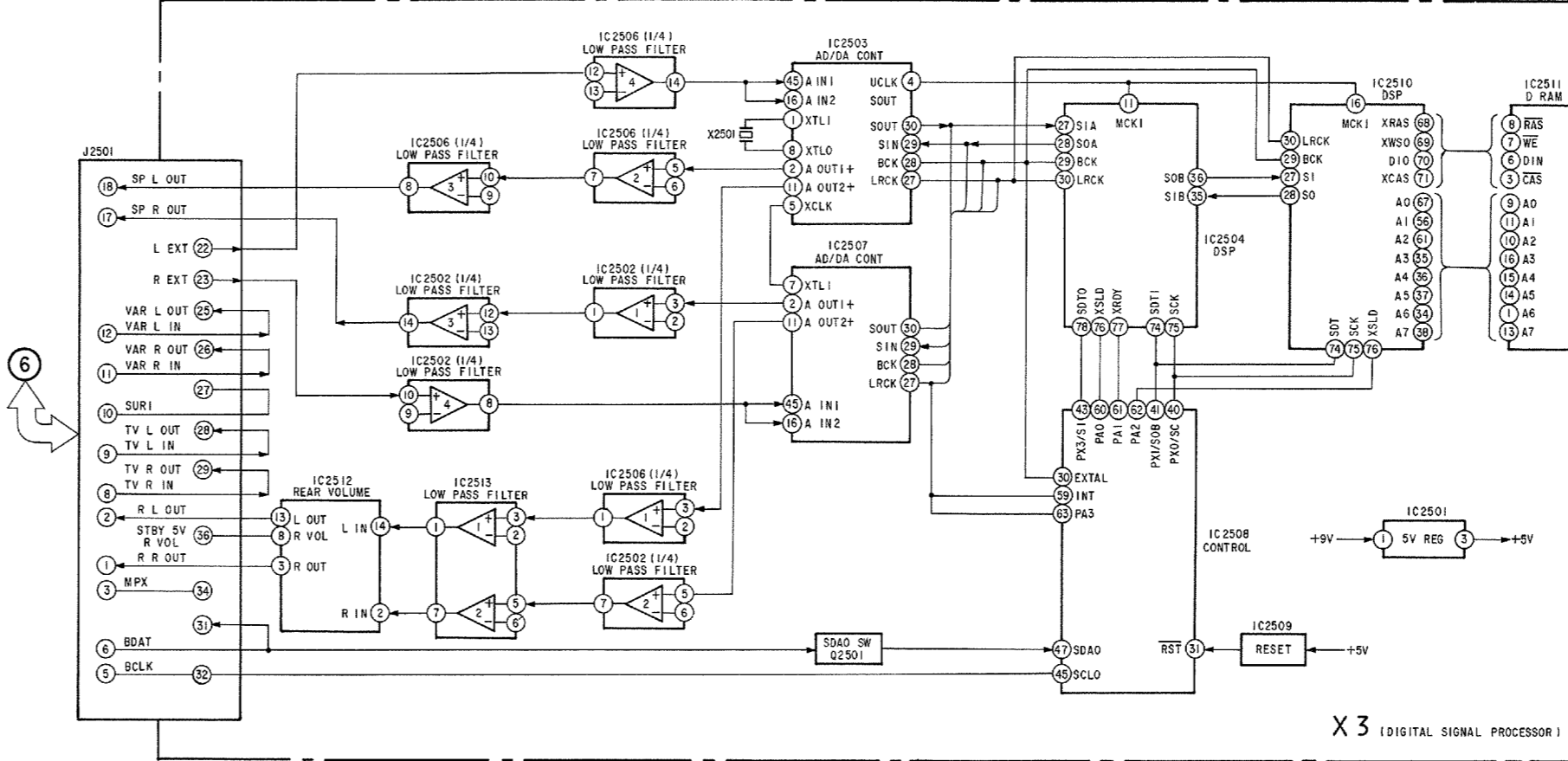
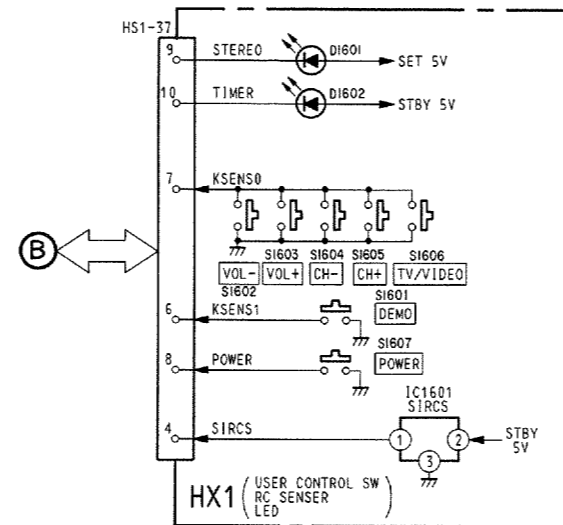
SECTION 6

DIAGRAMS

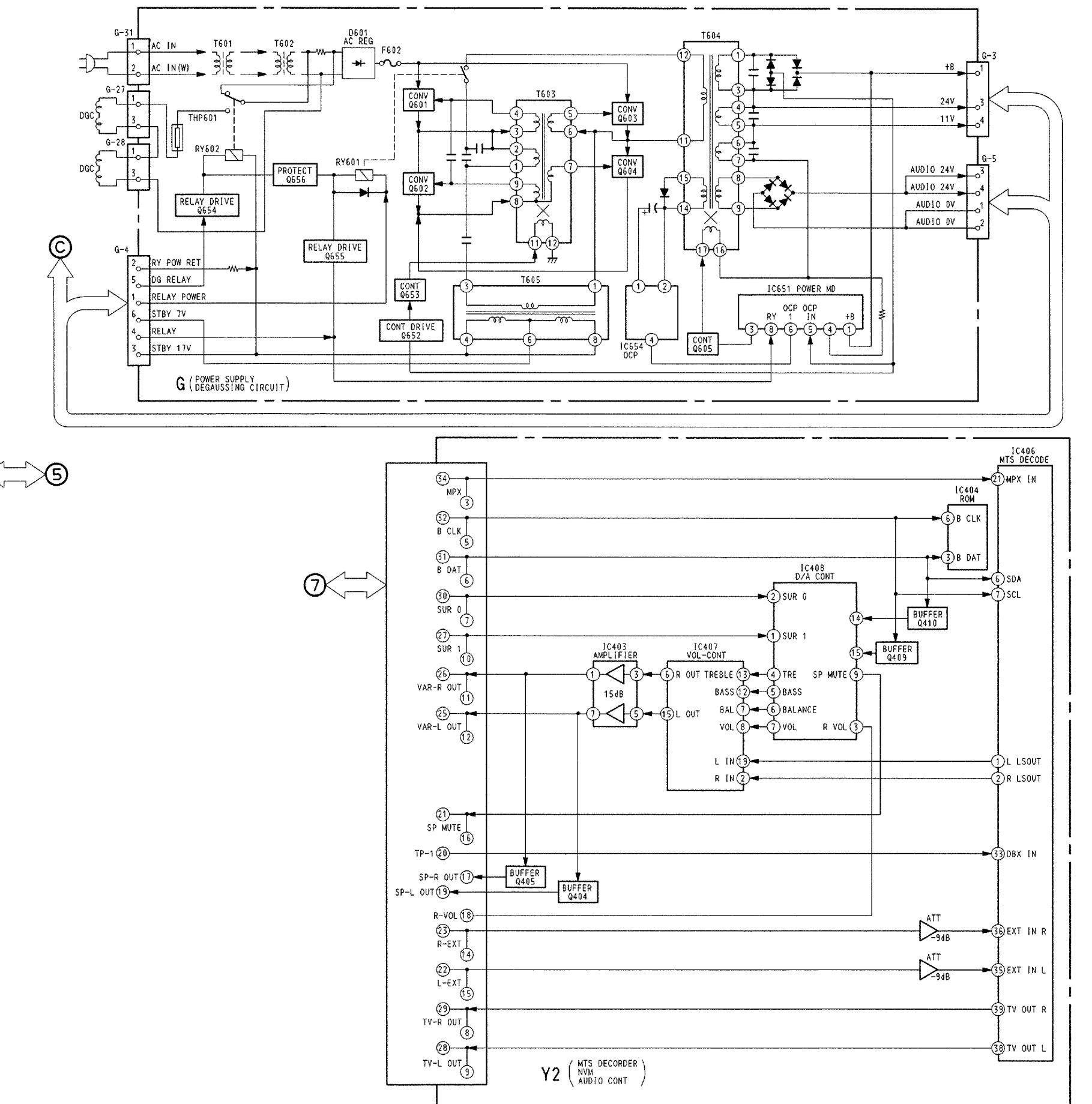
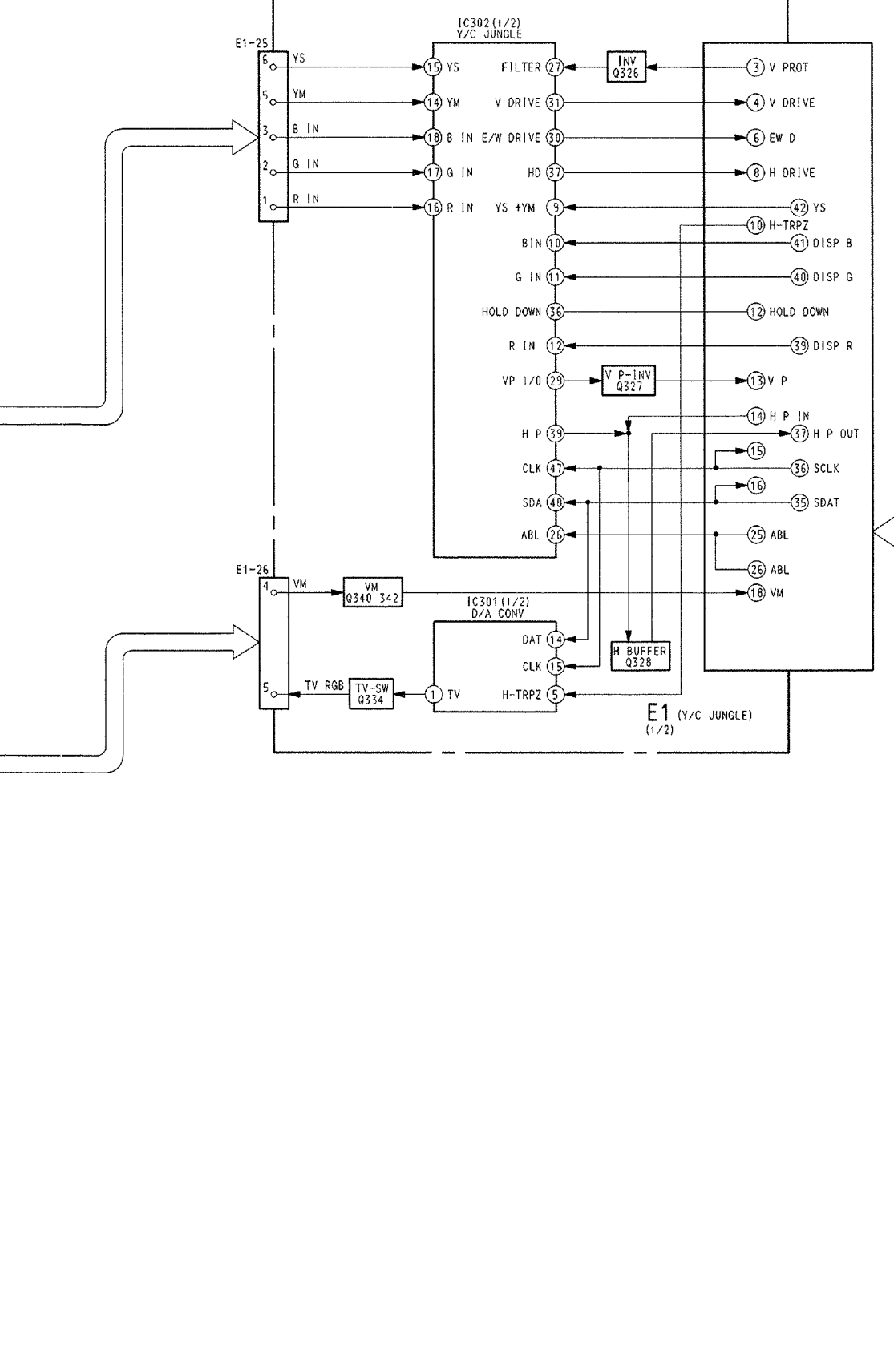
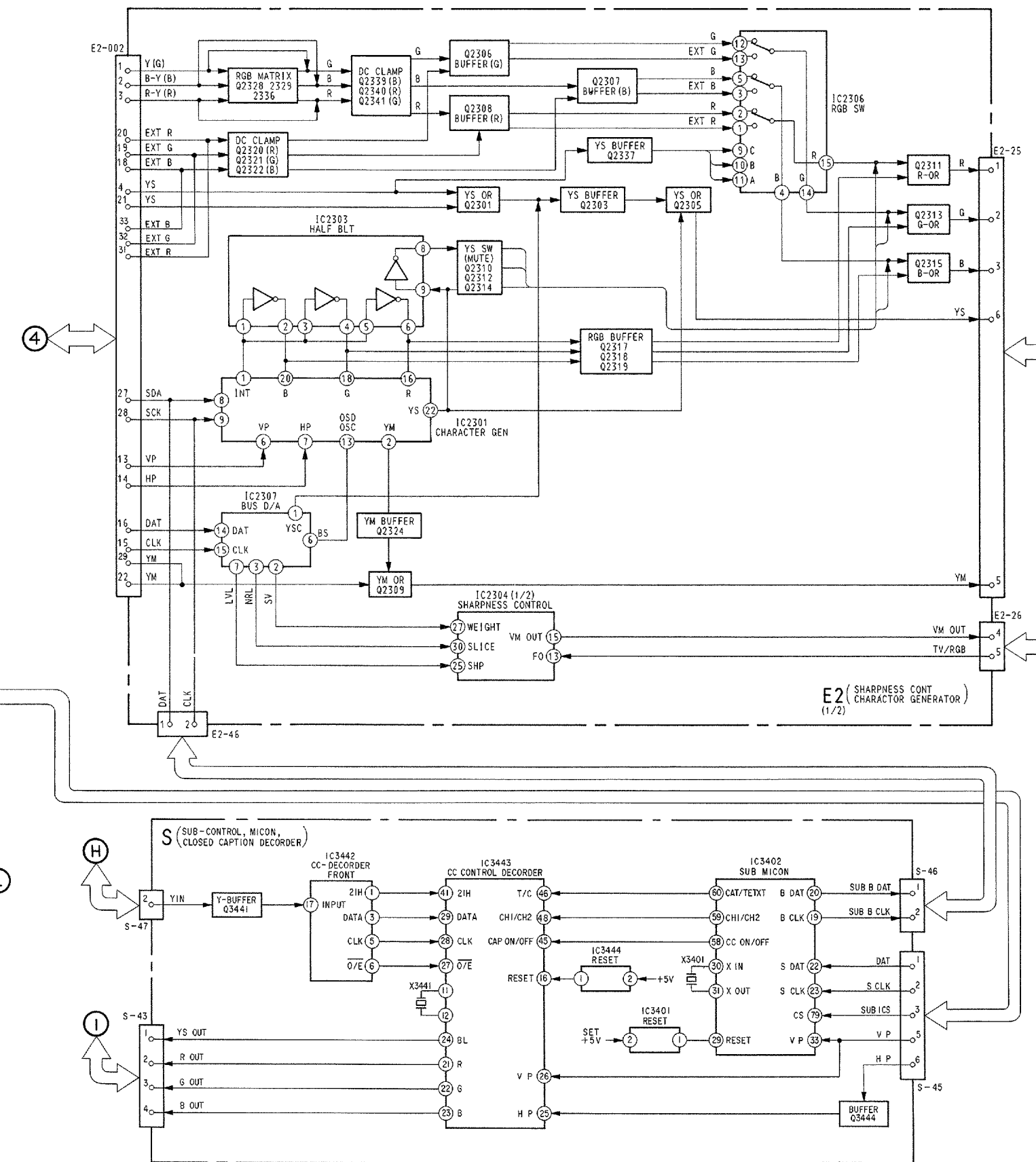
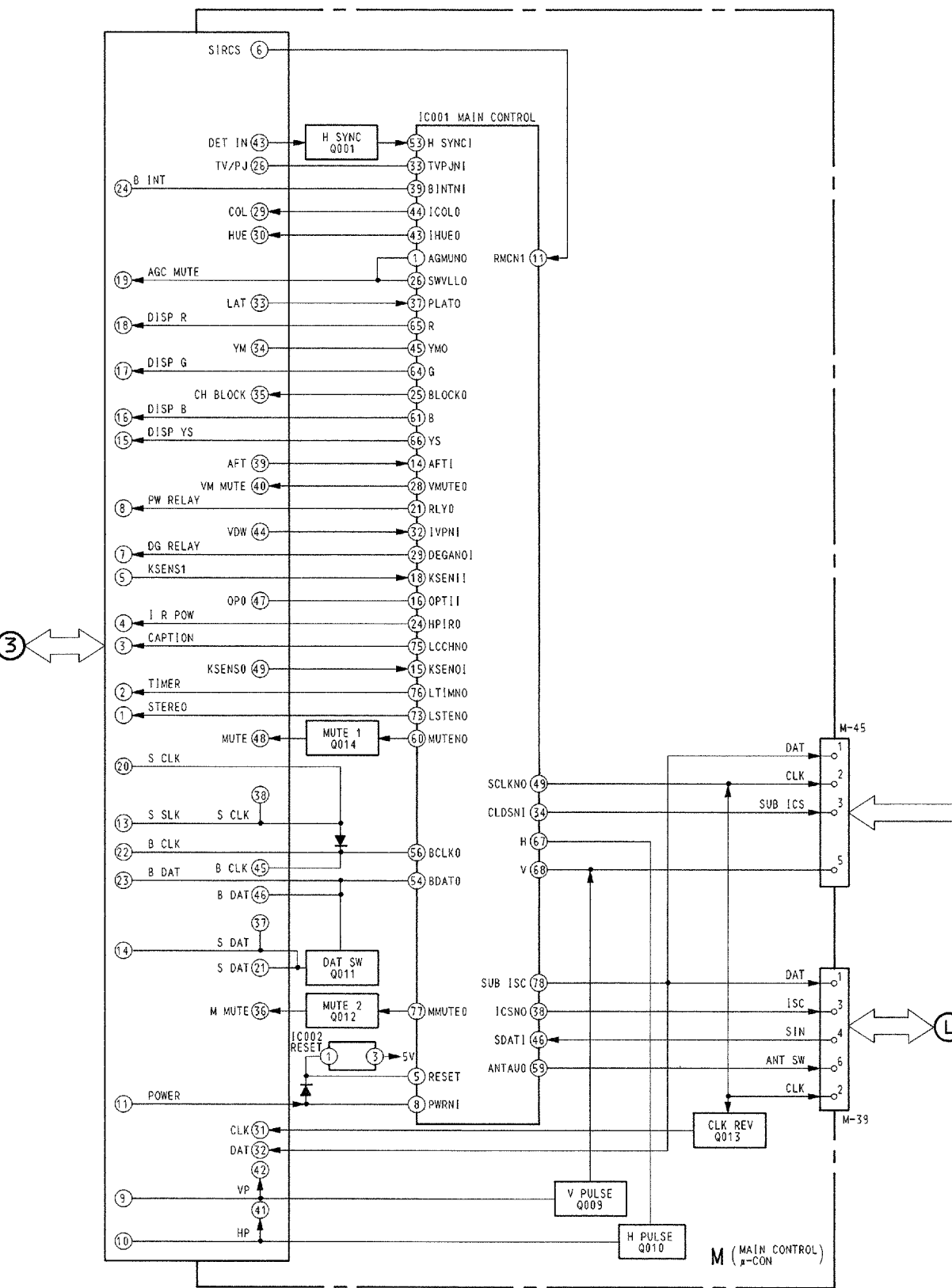
6-1.BLOCK DIAGRAM (1)

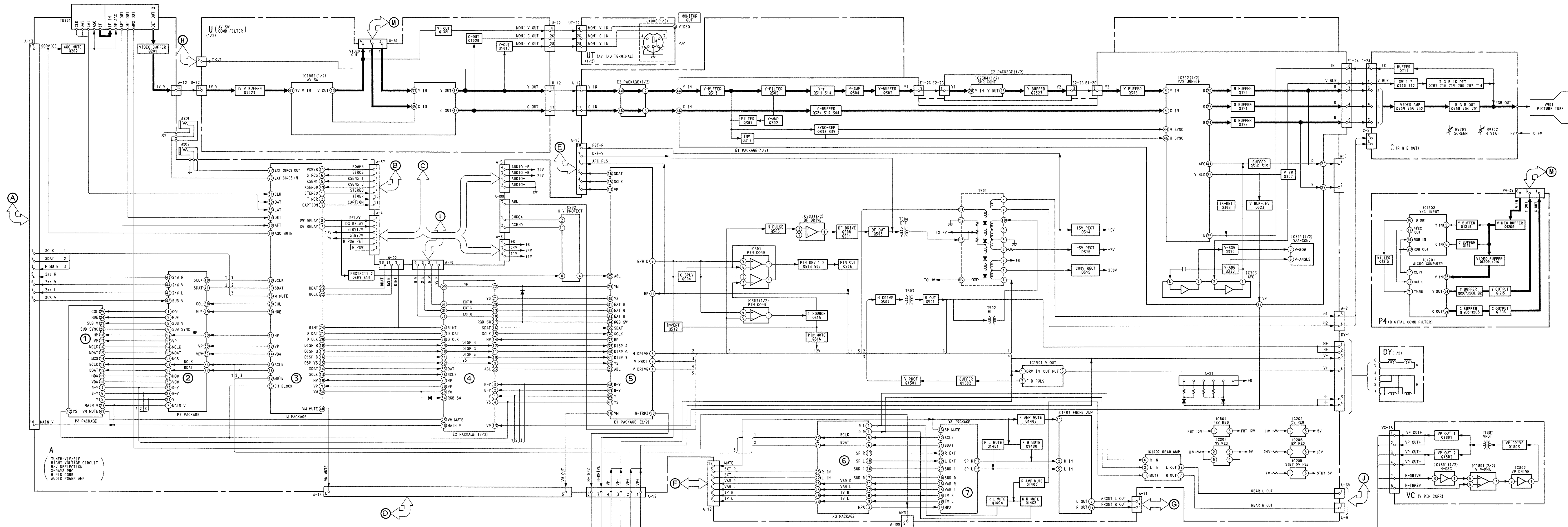


— 70 —

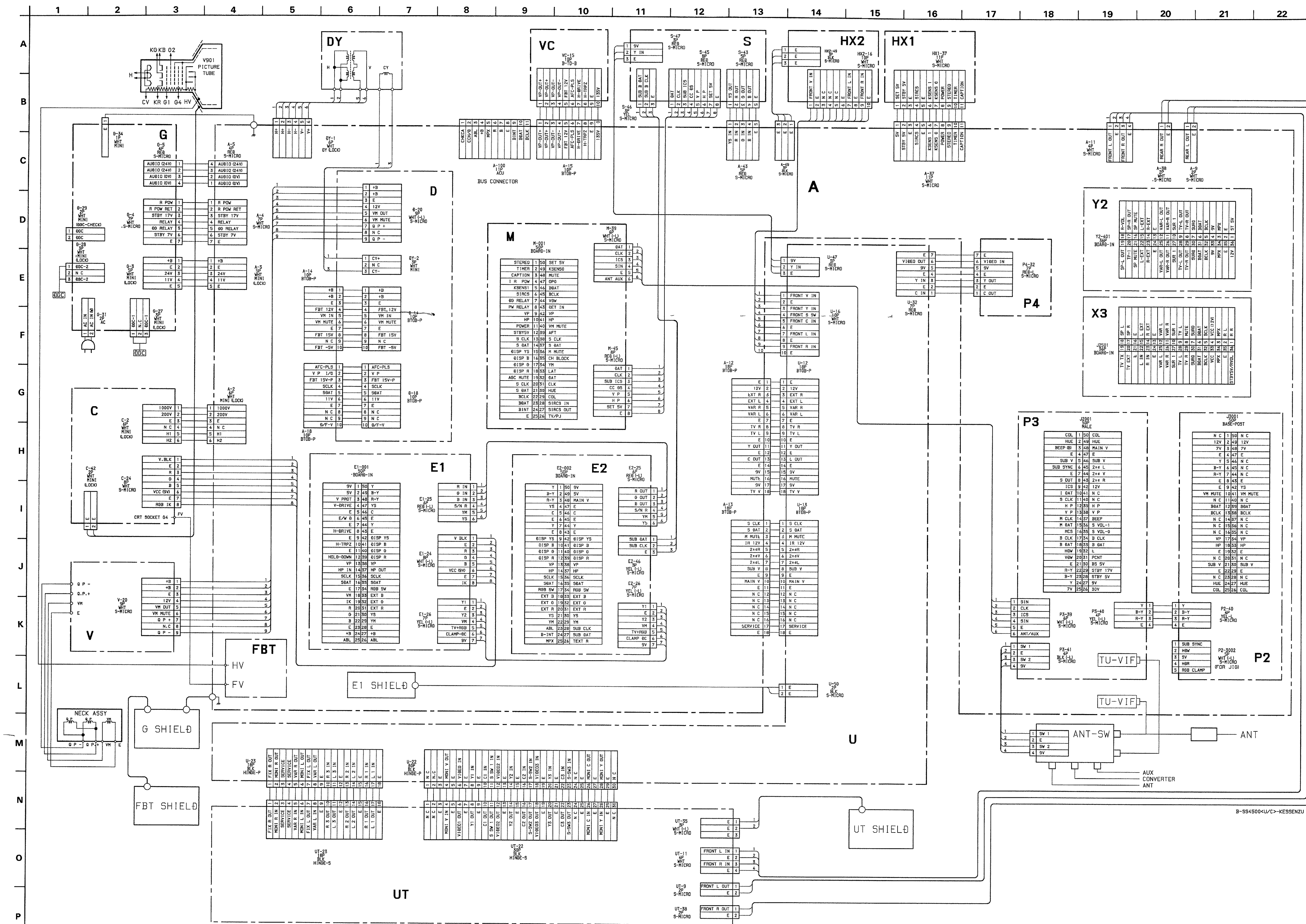


6-3.BLOCK DIAGRAM (3)

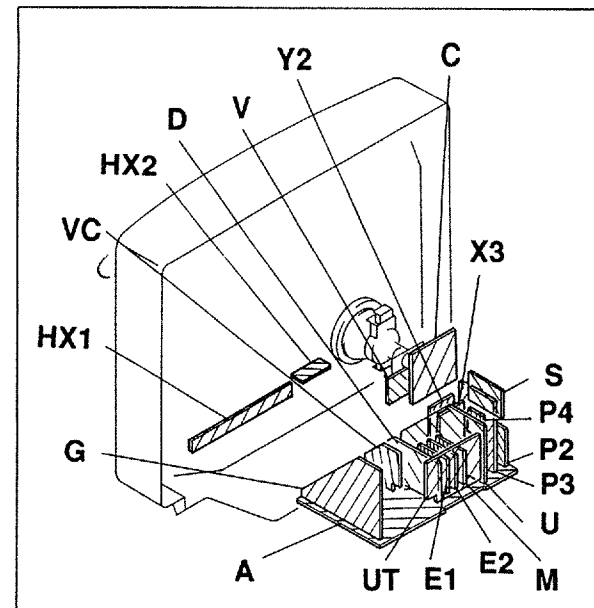




6-5.FRAME SCHEMATIC DIAGRAM



6-6.CIRCUIT BOARDS LOCATION



6-7.SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

## Note:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted
- $\text{pF}$ ,  $\mu\text{F}$ ,  $50\text{WV}$  or less are not indicated except for electrolytic and tantalums
- All electrolytics are in  $50\text{V}$  unless otherwise specified
- All resistors are in ohms
- $K\Omega = 1000\Omega$ ,  $M\Omega = 1000K\Omega$
- Indication of resistance, which does not have one for rating electrical power, is as follows

Pitch 5 mm  
Rating electrical power 1/4W

- Chips resistors are 1/10W
- nonflammable resistor
- internal component
- panel designation, and adjustment for repair
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted
- earth-ground
- earth-chassis
- The components identified by  $\Delta$  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used
- When replacing components identified by  $\Delta$  mark the necessary adjustments indicated. If results do not meet the specified value, change the component identified by  $\Delta$  and repeat the adjustment until the specified value is achieved (Refer to R565 and R566 on page 51-53 in the Service Manual)
- When replacing the part in below table be sure to perform the related adjustment

- Readings are taken with a color bar signal input
- Readings are taken with a  $10\text{ M}\Omega$  digital multimeter
- Voltage are dc with respect to ground unless otherwise noted
- Voltage variations may be noted due to normal production tolerance
- All voltages are in V
- B+ bus
- B- bus
- signal path

## Reference information

RESISTOR	RES	METAL FILM
	RC	SOLID
	FP	NONFLAMMABLE CARBON
	FUSE	NONFLAMMABLE FUSIBLE
	RW	NONFLAMMABLE WIREWOUND
	RS	NONFLAMMABLE METAL OXIDE
	RB	NONFLAMMABLE CEMENT
	*	ADJUSTMENT RESISTOR
COIL	LF-8L	MICRO INDUCTOR
CAPACITOR	TA	TANTALUM
	PS	STYROL
	PP	POLYPROPYLENE
	PT	MYLAR
	MPS	METALIZED POLYESTER
	MPP	METALIZED POLYPROPYLENE
	ALB	BIPOLAR
	ALT	HIGH TEMPERATURE
	ALR	HIGH RIPPLE

Note The symbol  $\Delta$  display is on the component side

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

The symbol  $\Delta$  indicate fast operating fuse. Replace only with fuse of same rating as marked.

Note Les composants identifiés par un trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Le symbole  $\Delta$  indique une fusible à action rapide. Doit être remplacée par une fusible de même valeur, comme marqué.

Part replaced ( $\Delta$ )	Adjustment ( $\Delta$ )
IC502, Q509, Q510, R565, R567, R568, R569 ... A BOARD	R565 (HOLD-DOWN)
IC502, Q509, Q510, D502, C531, R554, R568, R567, R568, R569, R1506, T501 ... A BOARD	R566 (HOLD-DOWN)
IC651, R651 ... G BOARD	



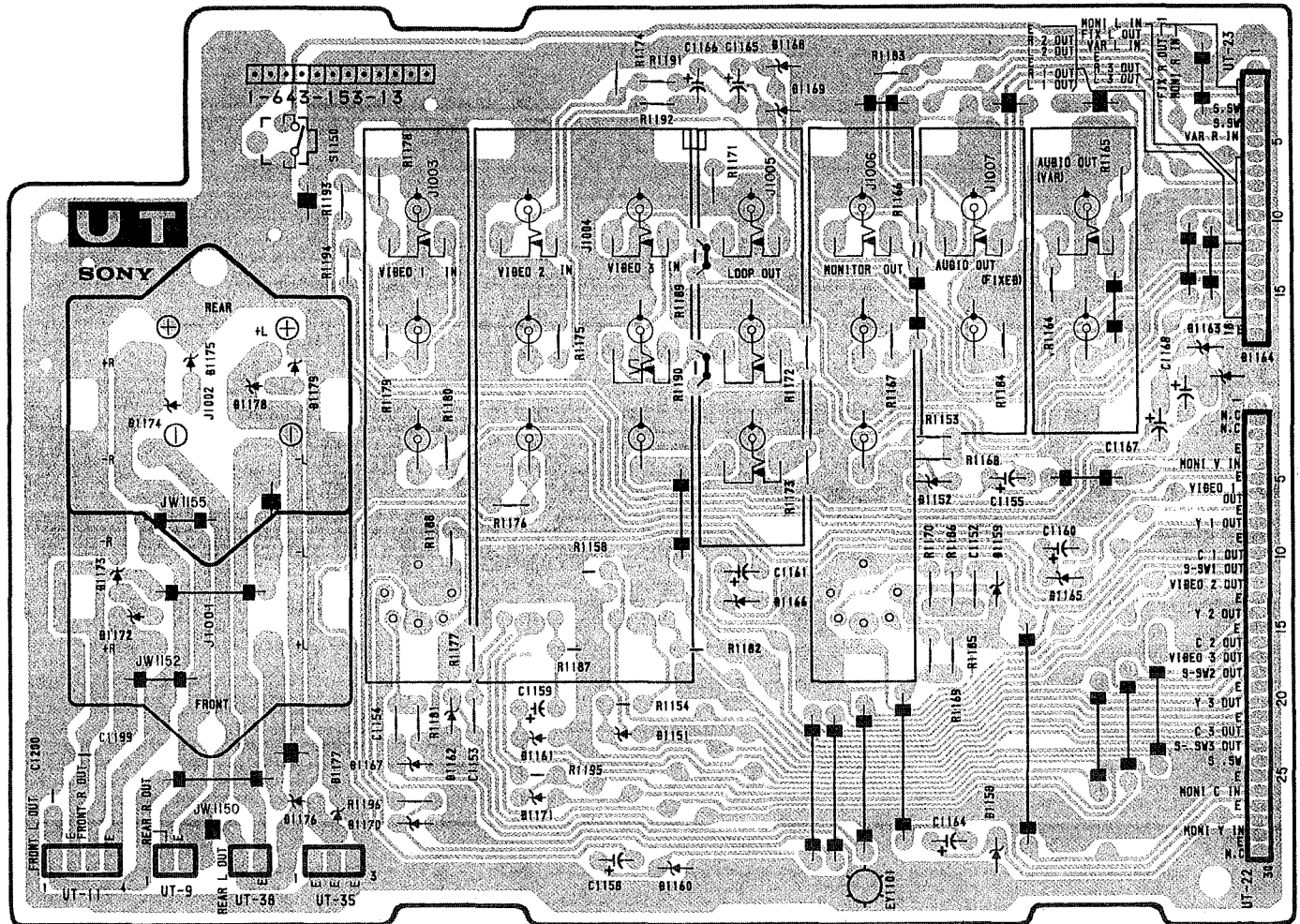
UT

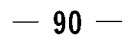
[AV I/O TERMINAL]

U

[AV SW,  
COMB FILTER]

- UT BOARD -



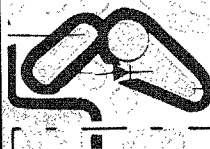


IC	
IC1002	B - 3
IC1010	E - 4
IC1011	F - 2
TRANSISTOR	
Q1009	D - 2
Q1010	E - 2
Q1012	G - 3
Q1013	G - 4
Q1016	E - 3
Q1017	B - 5
Q1018	E - 2
Q1019	E - 3
Q1020	B - 5
Q1021	B - 2
Q1022	E - 1
Q1023	C - 2
Q1025	G - 2
Q1029	B - 2
Q1030	D - 2
Q1031	E - 2
Q1032	C - 4
Q1033	E - 2
Q1034	G - 2
DIODE	
D1005	A - 2
D1009	B - 4
D1010	A - 4
D1011	B - 3
D1012	D - 3
D1013	E - 3
D1014	A - 2
D1015	B - 4
D1017	B - 2
D1018	G - 2
D1019	G - 2
D1020	E - 2
D1021	E - 3
D1022	E - 3
D1023	E - 3
D1025	G - 2
D1026	G - 2
D1027	E - 3

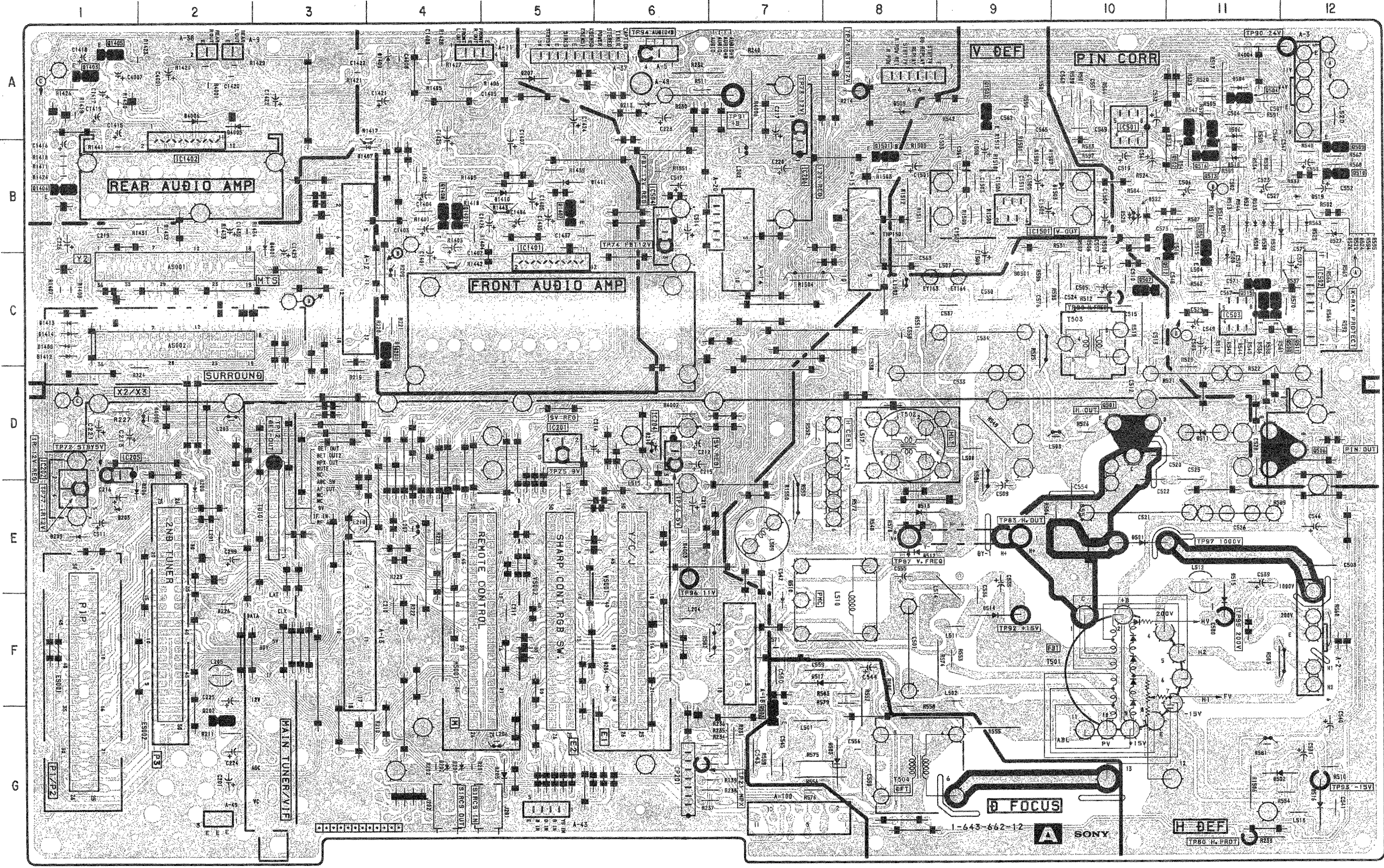
**A** TUNER - VIF/SIF, HIGH VOLTAGE CIRCUIT,  
H/V DEFLECTION, X-RAYS. PROT. H. PIN  
CORR. AUDIO POWER AMP.

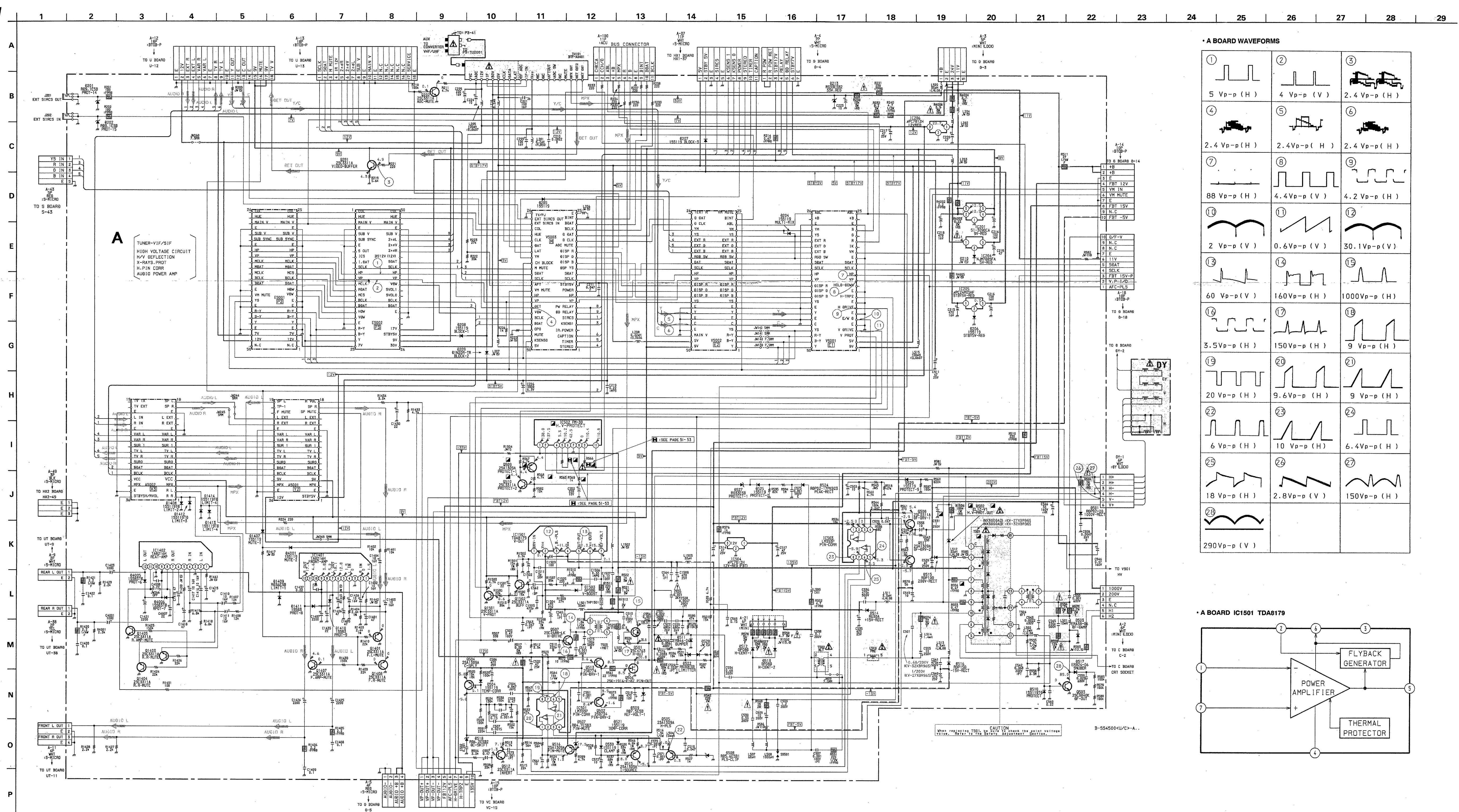
- A BOARD -

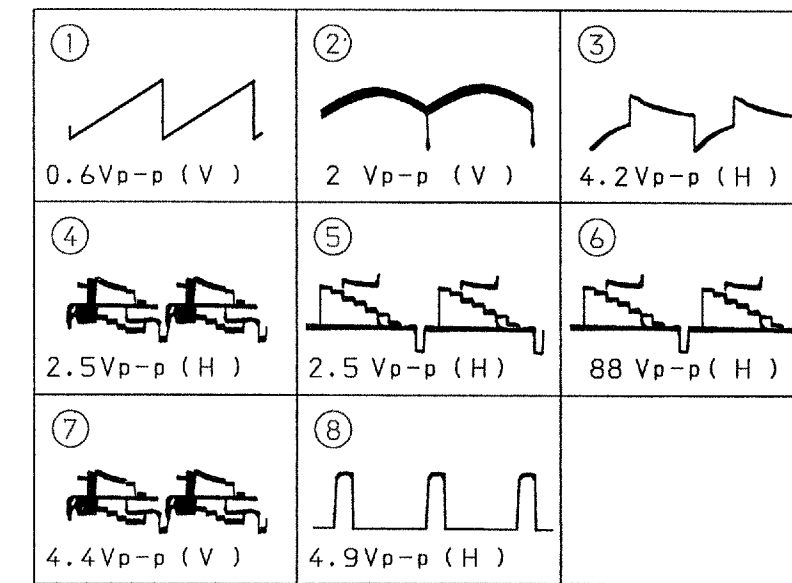
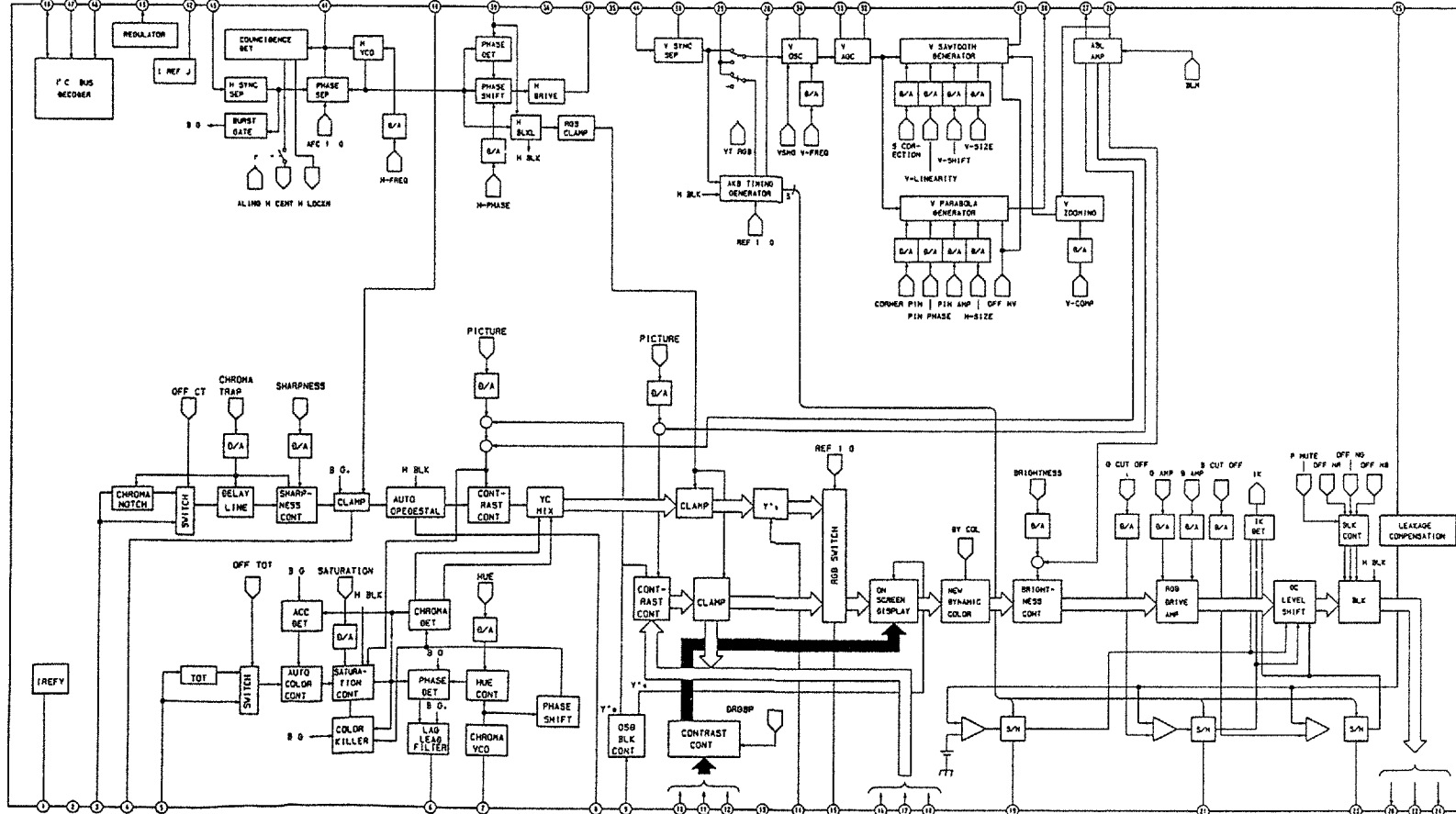
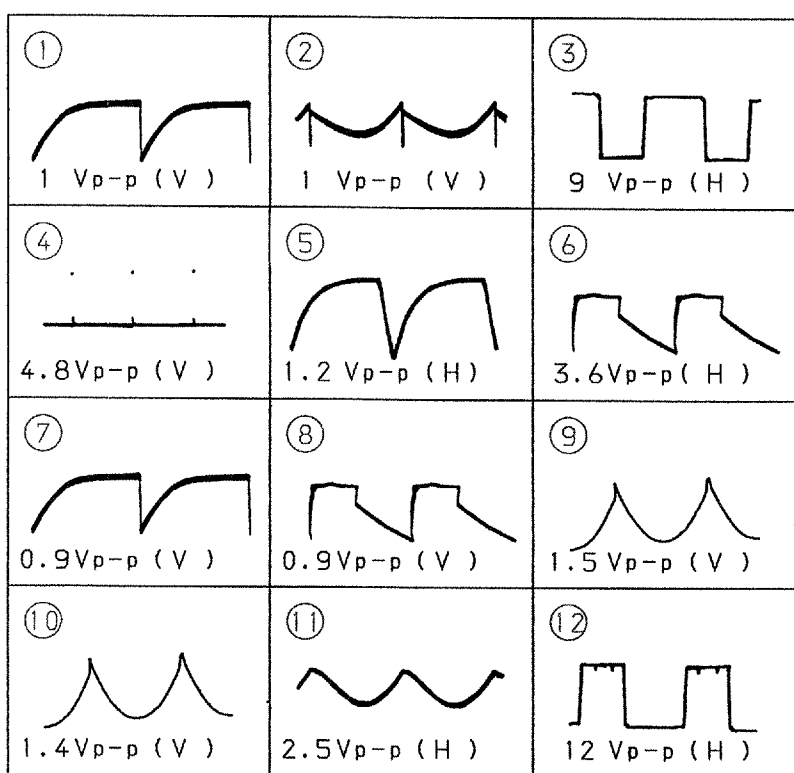
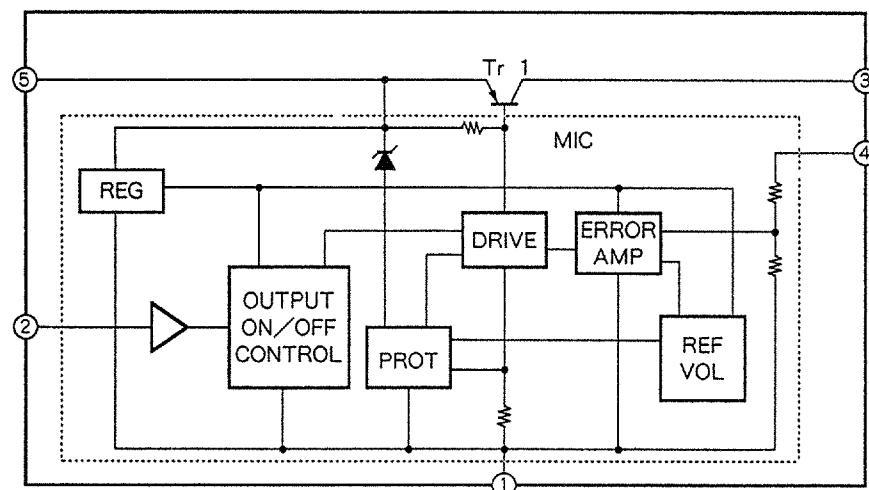
IC		D207	A-5
IC201	D-5	D208	E-2
	D-1	D209	E-1
	D-6	D213	A-6
	D-1	D501	E-10
	B-7	D502	G-11
	A-10	D503	G-8
	C-12	D504	A-11
	C-11	D506	A-11
	B-6	D508	C-11
	C-5	D509	A-8
IC1501	B-9	D510	F-7
		D511	D-11
		D512	E-8
TRANSISTOR		D513	E-8
Q201	C-4	D514	F-9
Q202	G-2	D515	F-11
Q501	D-10	D516	G-12
Q502	A-11	D517	F-7
Q503	G-7	D518	B-11
Q504	A-11	D521	B-11
Q505	B-11	D522	B-10
Q506	D-12	D524	B-11
Q507	C-10	D525	B-12
Q508	C-11	D527	B-12
Q509	B-12	D529	B-11
Q510	B-12	D530	B-11
Q511	C-11	D1407	B-3
Q512	B-10	D1408	C-1
Q513	A-11	D1409	A-4
Q515	C-11	D1410	B-5
Q516	B-11	D1411	B-5
Q1401	B-4	D1412	C-1
Q1407	B-5	D1413	C-1
Q1408	B-4	Q1414	C-1
Q1501	B-8	D1503	B-10
Q1502	A-9	D4001	B-3
DIODE			
D205	G-5		
D206	E-1		



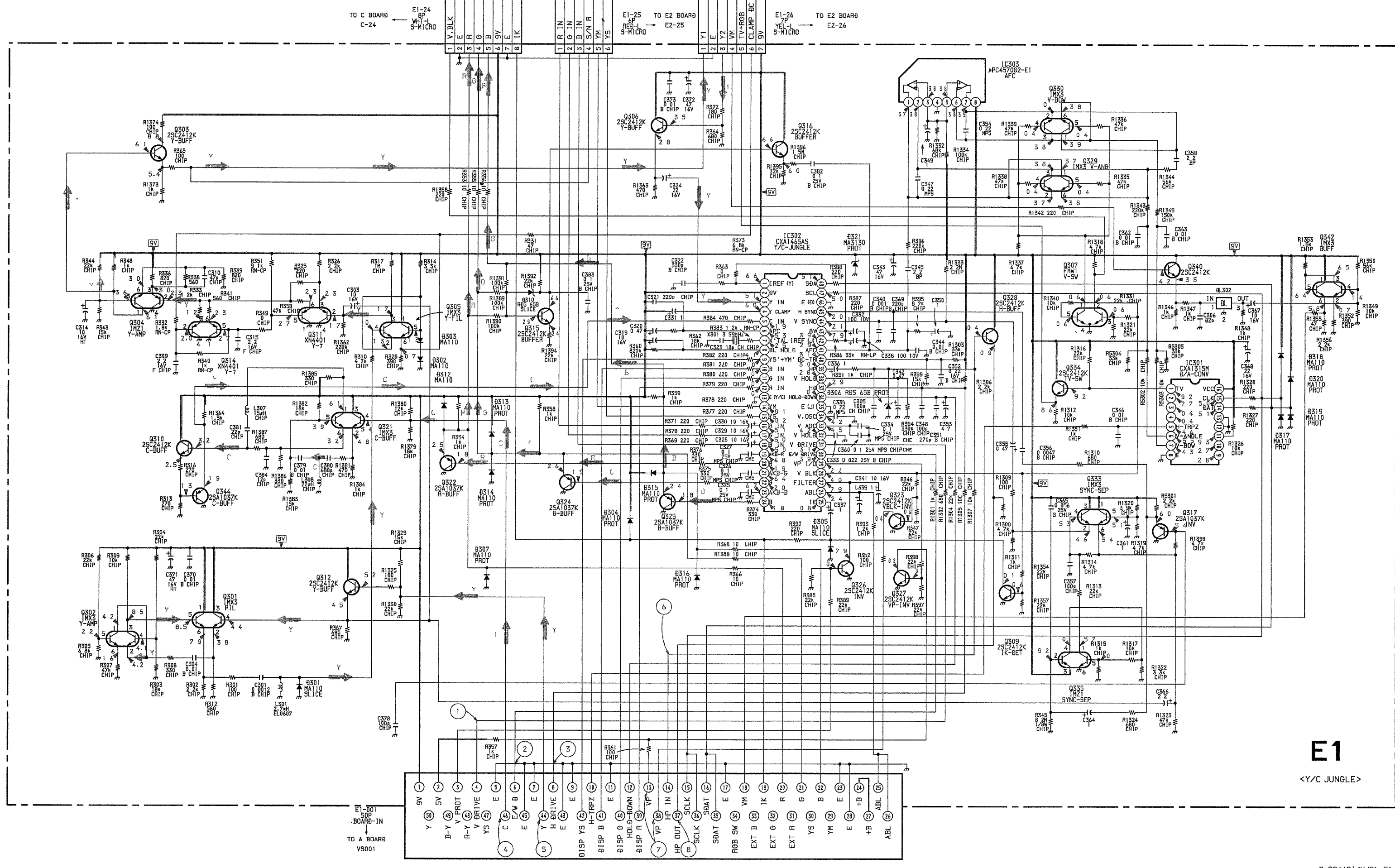
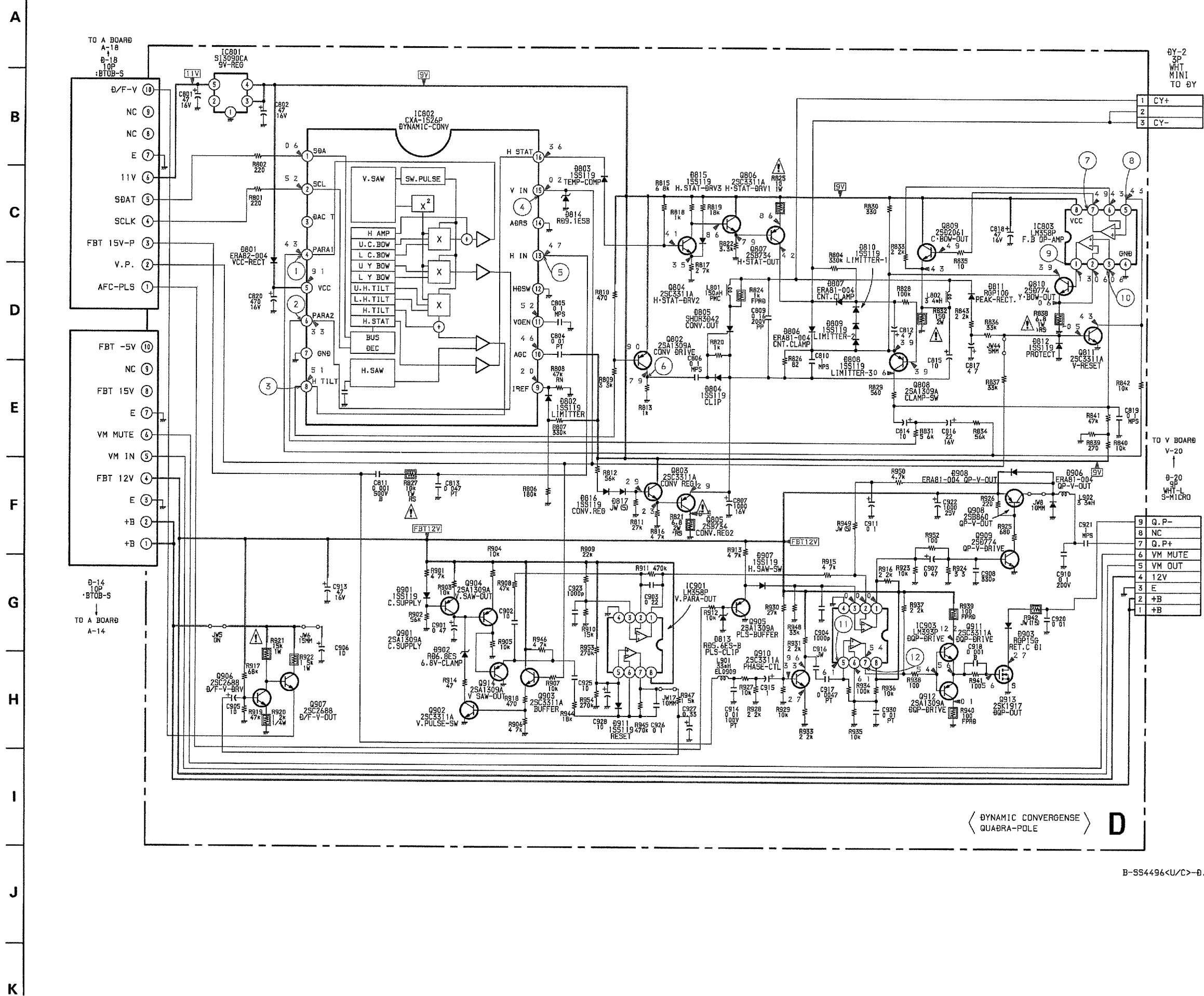
**NOTE:**  
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.







1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30



E1  
<Y/C JUNGLE>

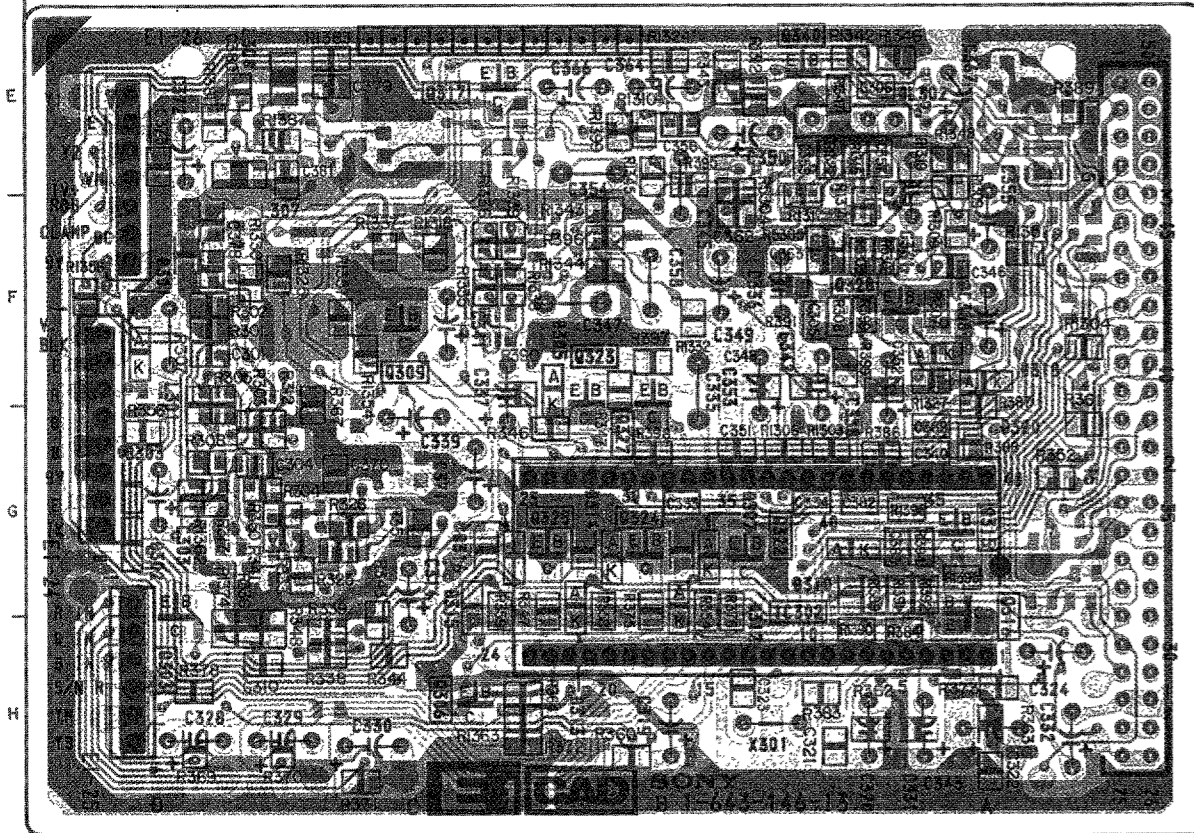
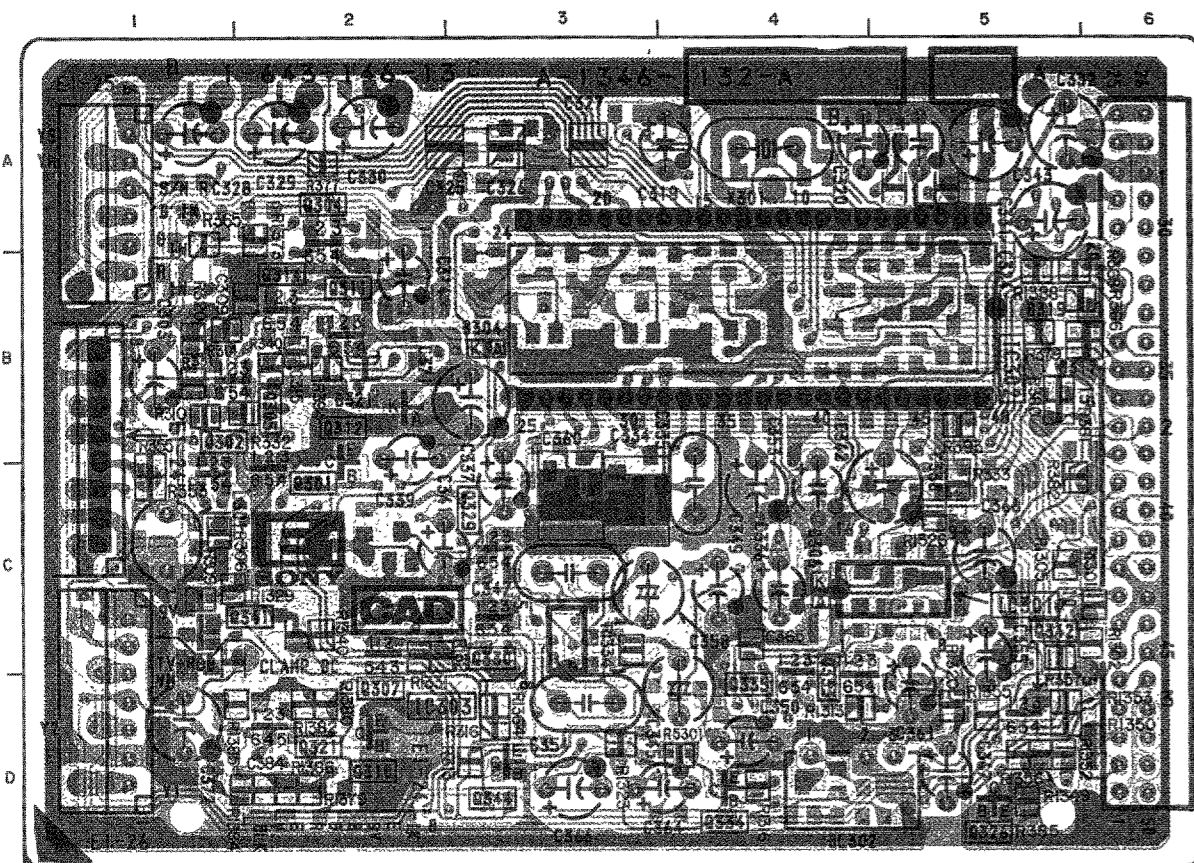
E1

[Y/C JUNGLE]

D

[DYNAMIC CONVERGENSE]  
[QUADRA - POLE]

- E1 BOARD -

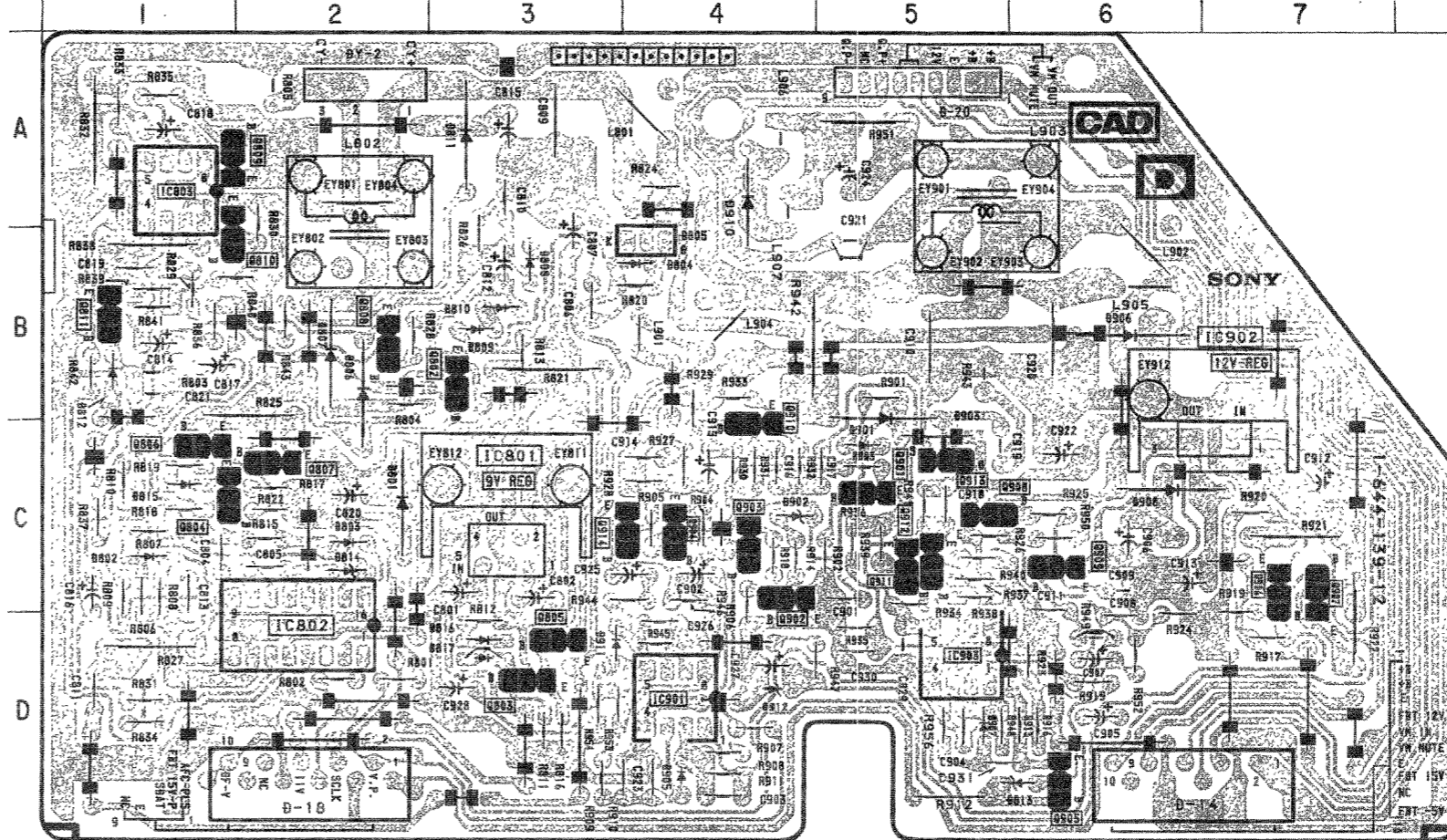


IC		DIODE	
IC301	C-5	D301	F-1
IC302	B-4, G-4	D302	G-1
IC303	C-3	D303	G-1
TRANSISTOR		D304	B-3
Q301	C-2	D305	F-3
Q302	C-1	D306	C-4
Q303	G-1	D307	G-4
Q304	A-2	D310	G-4
Q305	B-1	D312	G-4
Q306	H-3	D313	G-3
Q307	C-2	D314	G-3
Q309	F-2	D315	G-2
Q310	D-2	D316	G-3
Q311	B-2	D317	B-5
Q312	B-2	D318	F-5
Q314	B-2	D319	B-5
Q315	G-5	D320	G-5
Q316	G-5	D321	B-2
Q317	E-3		
Q321	D-2		
Q322	G-4		
Q323	F-3		
Q324	G-3		
Q325	G-3		
Q326	D-5		
Q327	G-3		
Q328	F-5		
Q329	C-3		
Q330	C-3		
Q333	D-4		
Q334	D-4		
Q335	D-4		
Q340	E-4		
Q342	D-5		
Q344	D-3		

Note :

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

- D BOARD -

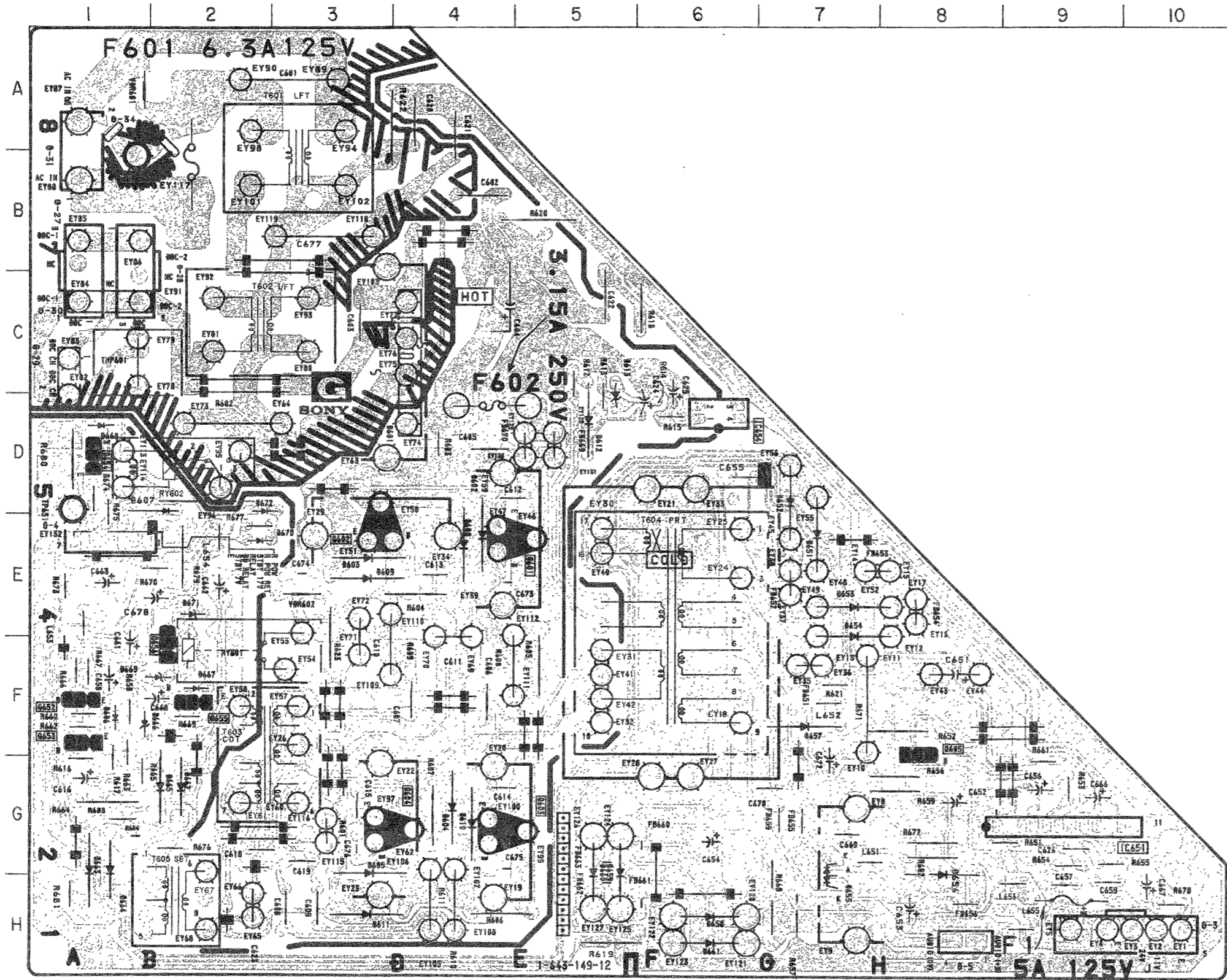


IC		DIODE	
IC801	C-3	D801	C-2
IC802	D-2	D802	C-1
IC803	A-1	D803	C-2
IC901	D-4	D804	B-4
IC903	D-5	D805	B-4
TRANSISTOR		D806	B-2
Q802	B-3	D807	B-2
Q803	D-4	D808	B-3
Q804	C-1	D809	B-3
Q805	D-3	D810	B-3
Q806	C-1	D811	A-3
Q807	C-2	D812	B-1
Q808	B-2	D813	D-6
Q809	A-1	D814	C-2
Q810	B-2	D815	C-1
Q811	B-1	D816	D-3
Q901	C-5	D901	C-5
Q902	C-4	D902	C-4
Q903	C-4	D903	B-5
Q904	C-4	D906	B-6
Q905	D-6	D907	D-5
Q906	C-7	D908	C-6
Q907	C-7	D911	D-3
Q908	C-5		
Q909	C-6		
Q910	B-4		
Q911	C-5		
Q912	C-5		
Q913	C-5		
Q914	C-3		

**G** [POWER SUPPLY,  
DEGAUSSING CIRCUIT] **E2** [SHARPNESS CONT,  
CHARACTOR GENERATER]

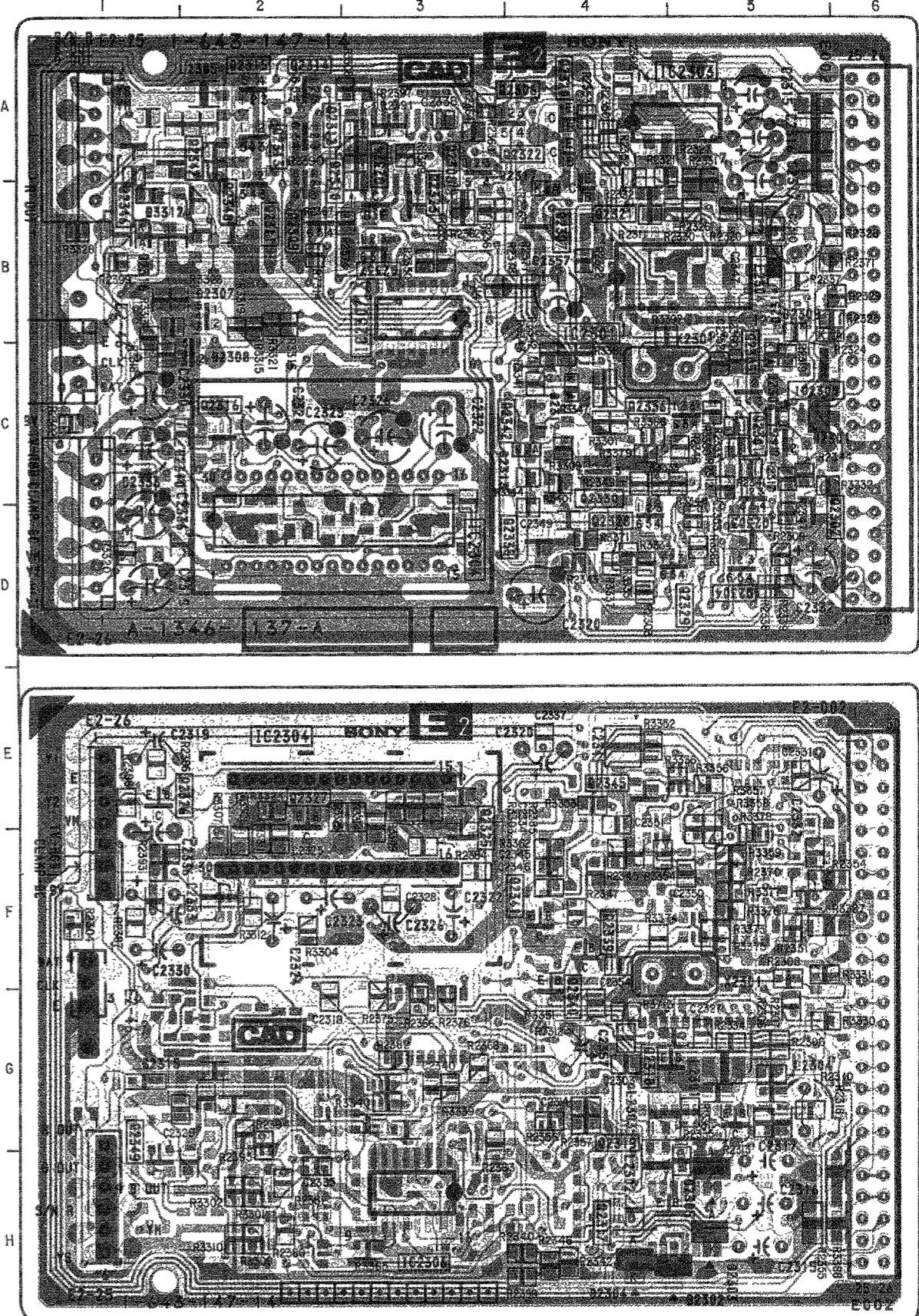
- G BOARD -

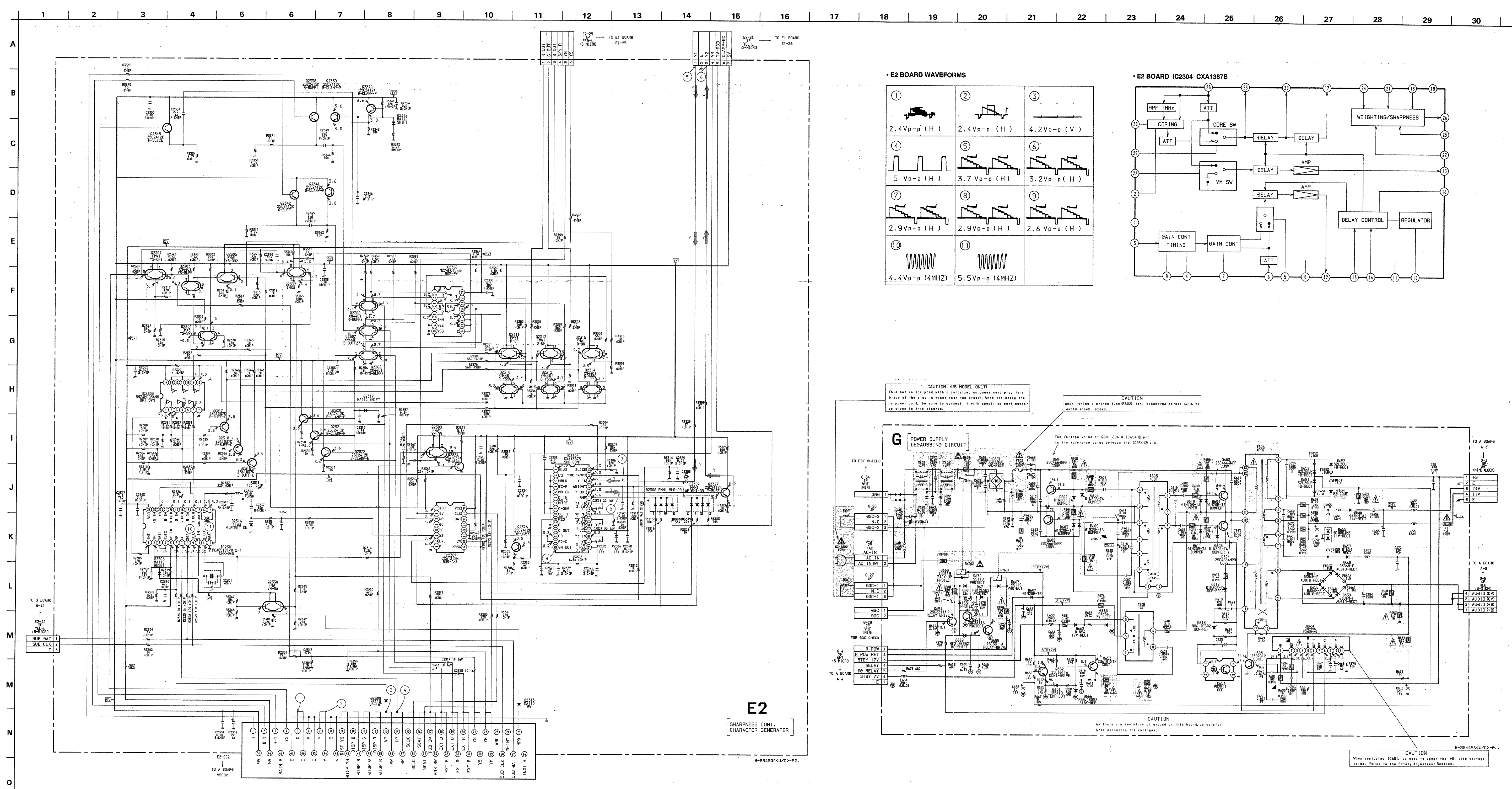
IC		D613	D-5
IIC651	G-9	D651	E-7
IC654	D-6	D652	D-7
TRANSISTOR		D653	E-7
Q601	E-5	D654	F-7
Q602	E-3	D655	H-7
Q603	G-5	D656	H-8
Q604	G-4	D657	F-7
Q605	F-8	D658	H-6
Q652	F-1	D659	G-5
Q653	F-1	D660	G-5
Q654	D-1	D661	H-6
Q655	F-2	D663	G-1
Q656	F-2	D665	G-2
DIODE		D666	F-1
D601	C-4	D667	F-2
D602	E-4	D668	D-1
D603	E-3	D669	F-2
D604	G-4	D670	E-2
D605	G-3	D671	E-2
D606	F-1	D672	D-2
D607	D-2		
D608	E-4		
D609	E-3		
D610	G-4		
D611	H-3		
D612	D-5		



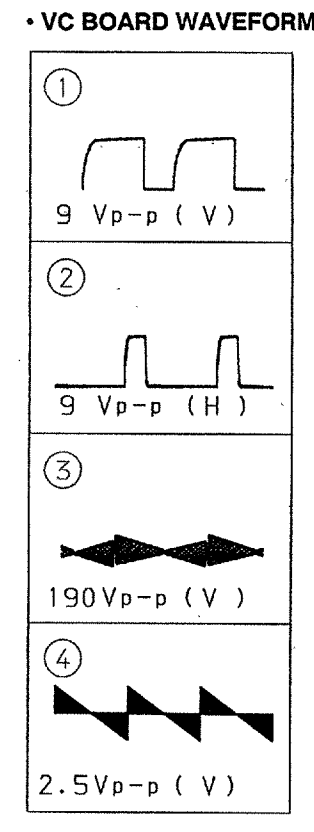
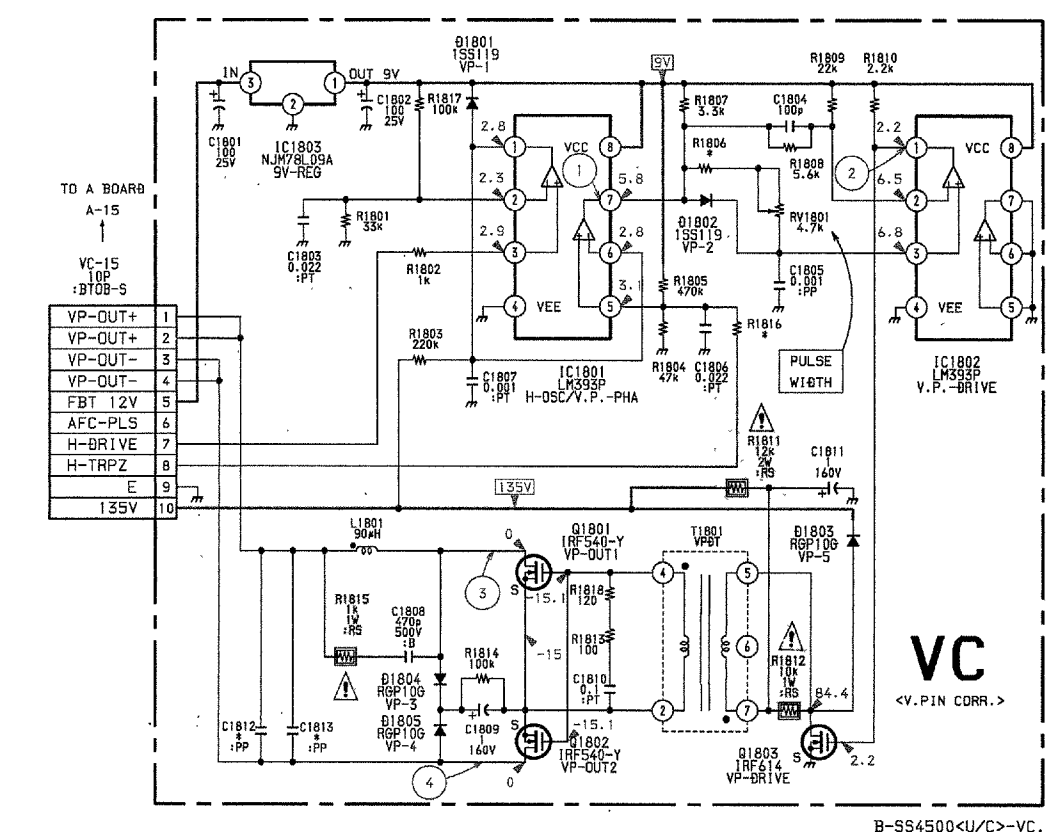
- E2 BOARD -

IC		IC2031	B-4
IC2303	A-5	IC2304	D-3, E-2
IC2306	H-3	IC2307	B-3
TRANSISTOR		Q2301	C-5
Q2303	C-5	Q2304	D-5
Q2305	C-5	Q2306	A-3
Q2307	B-4	Q2308	A-3
Q2309	B-2	Q2310	A-2
Q2311	A-2	Q2312	A-2
Q2313	A-2	Q2314	A-2
Q2315	A-2	Q2317	H-4
Q2318	G-4	Q2319	G-5
Q2320	A-4	Q2321	A-4
Q2322	A-4	Q2324	B-3
Q2326	E-1	Q2327	E-2
Q2328	D-4	Q2329	D-4
Q2330	C-4	Q2336	C-5
Q2337	B-3	Q2339	F-4
Q2340	F-4	Q2341	F-4
DIODE		D2306	C-5
D2307	B-2	D2308	B-2
D2309	B-2	D2312	C-4
D2313	C-4	D2314	B-5
D2317	A-4		



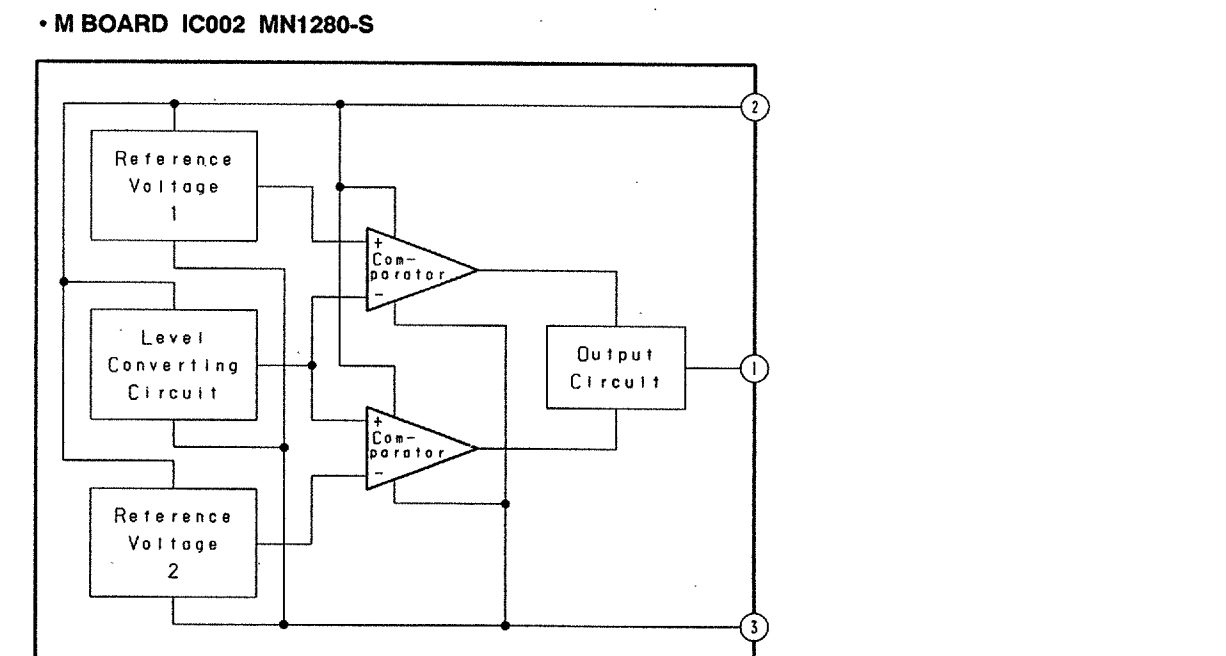
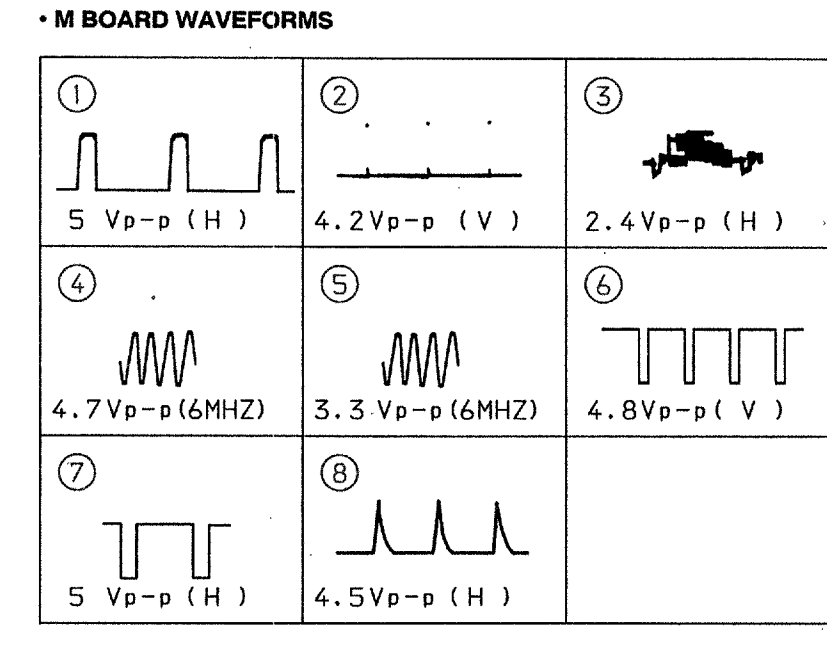
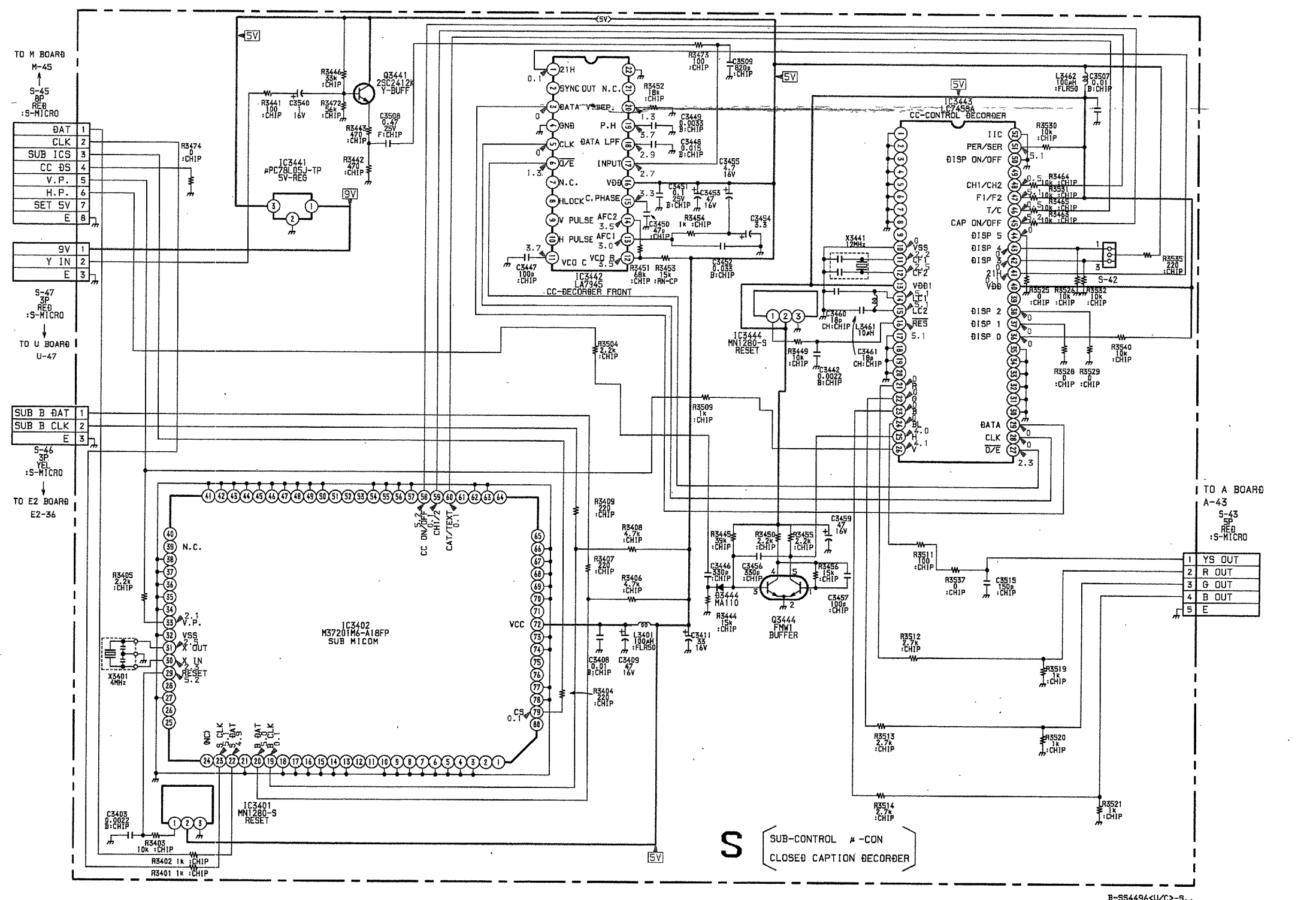
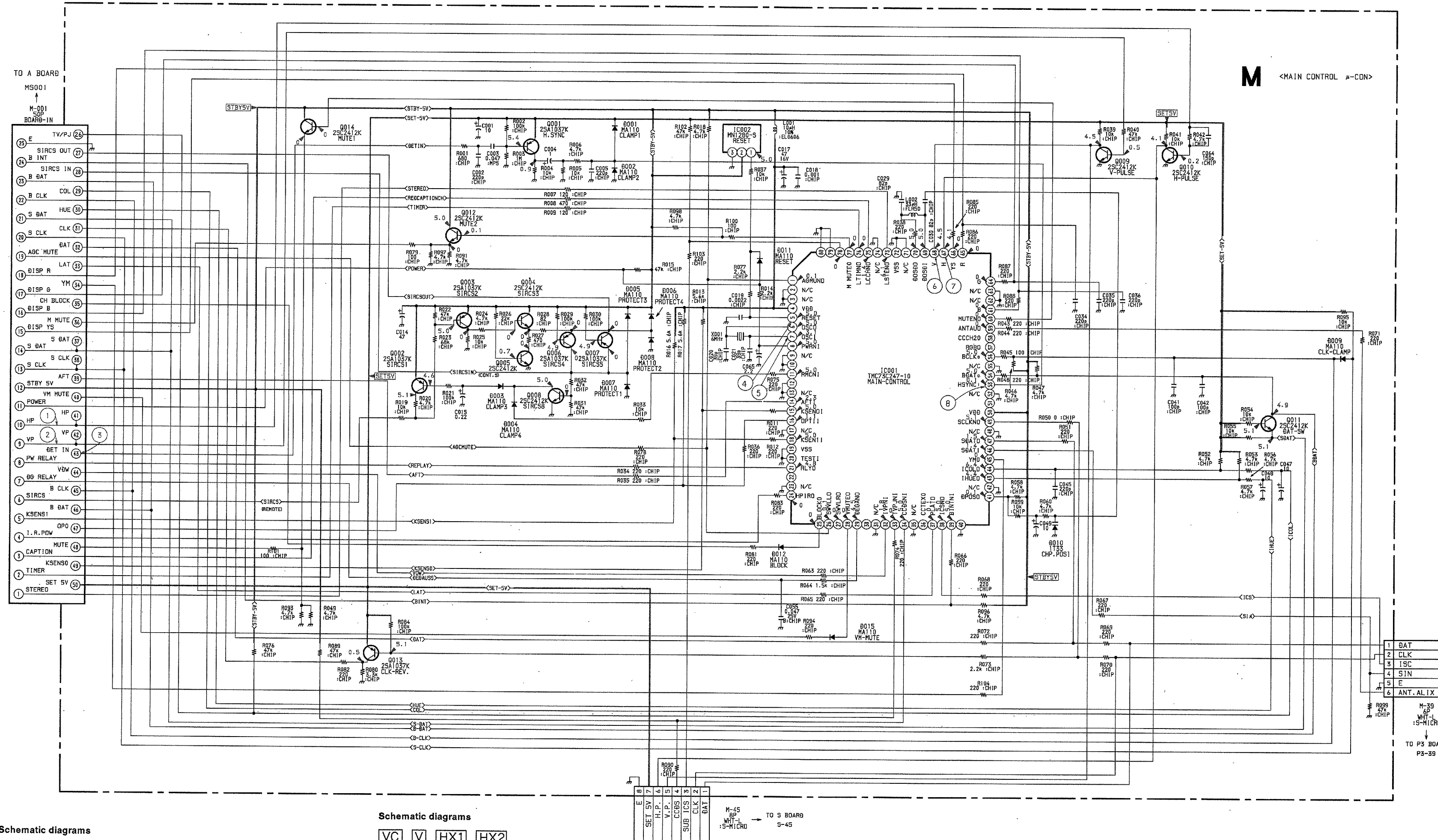
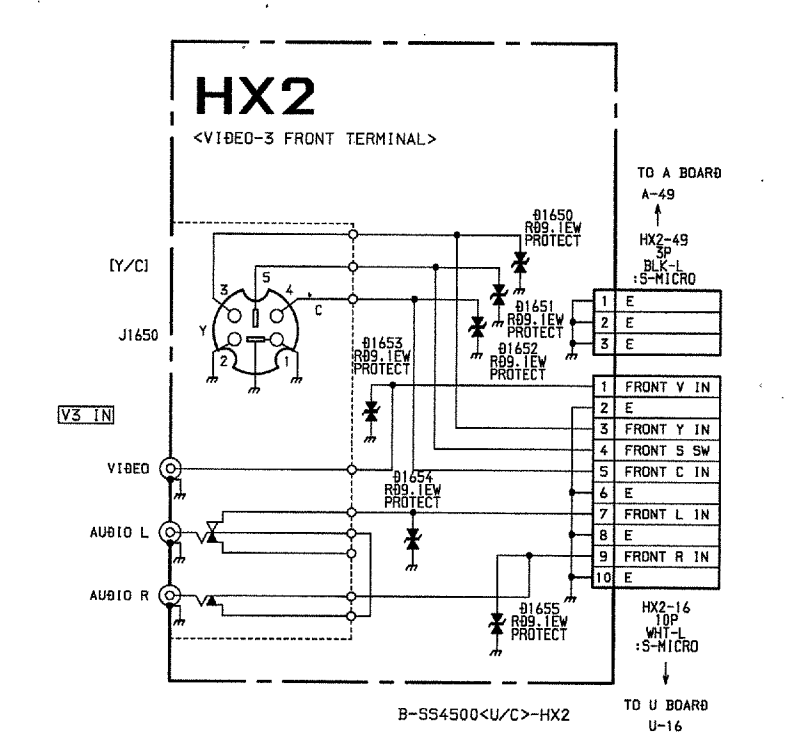
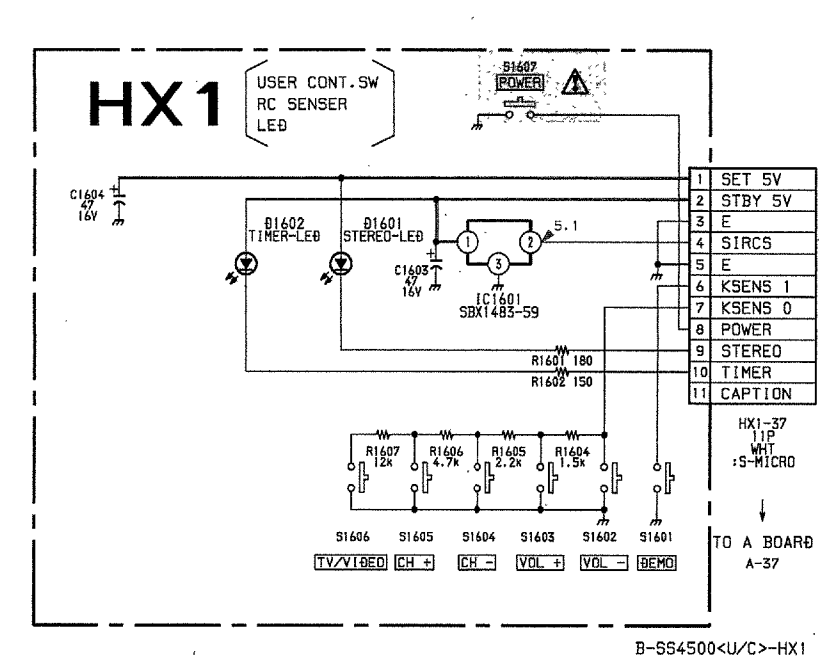
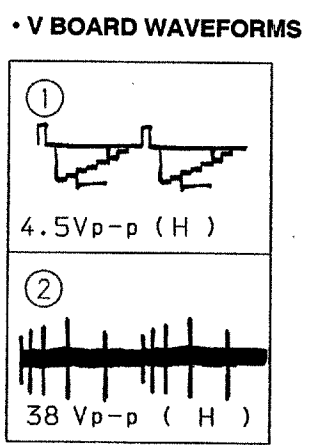
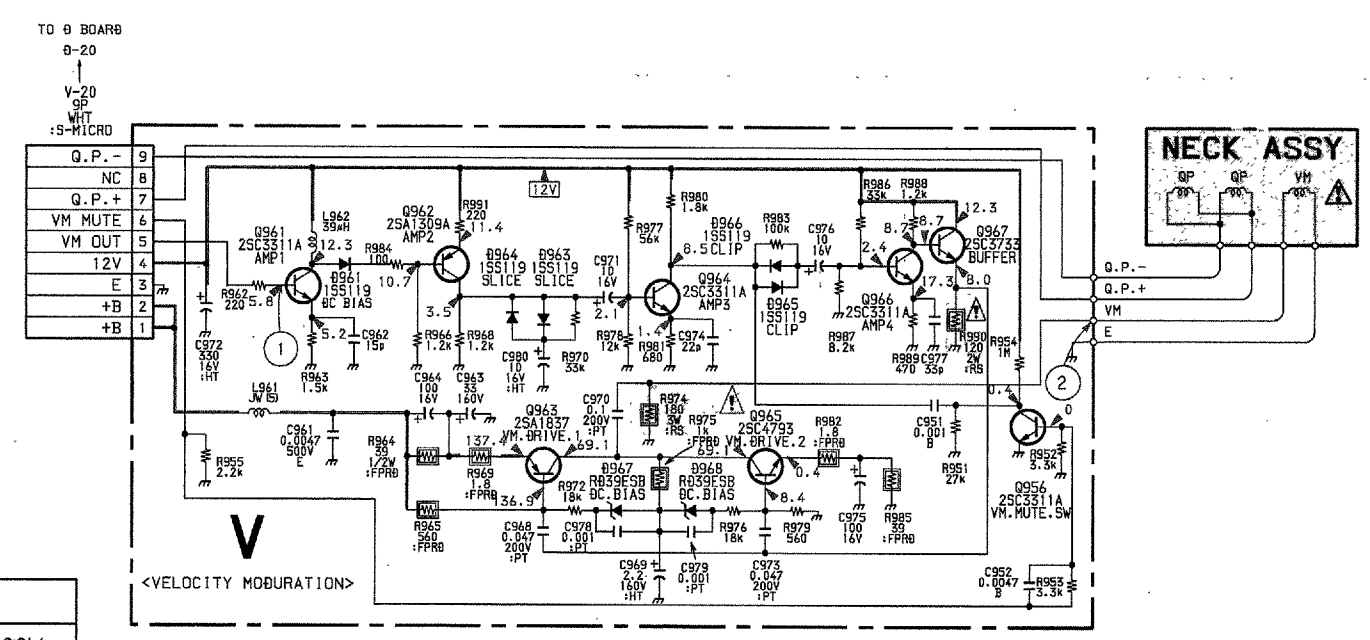


A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

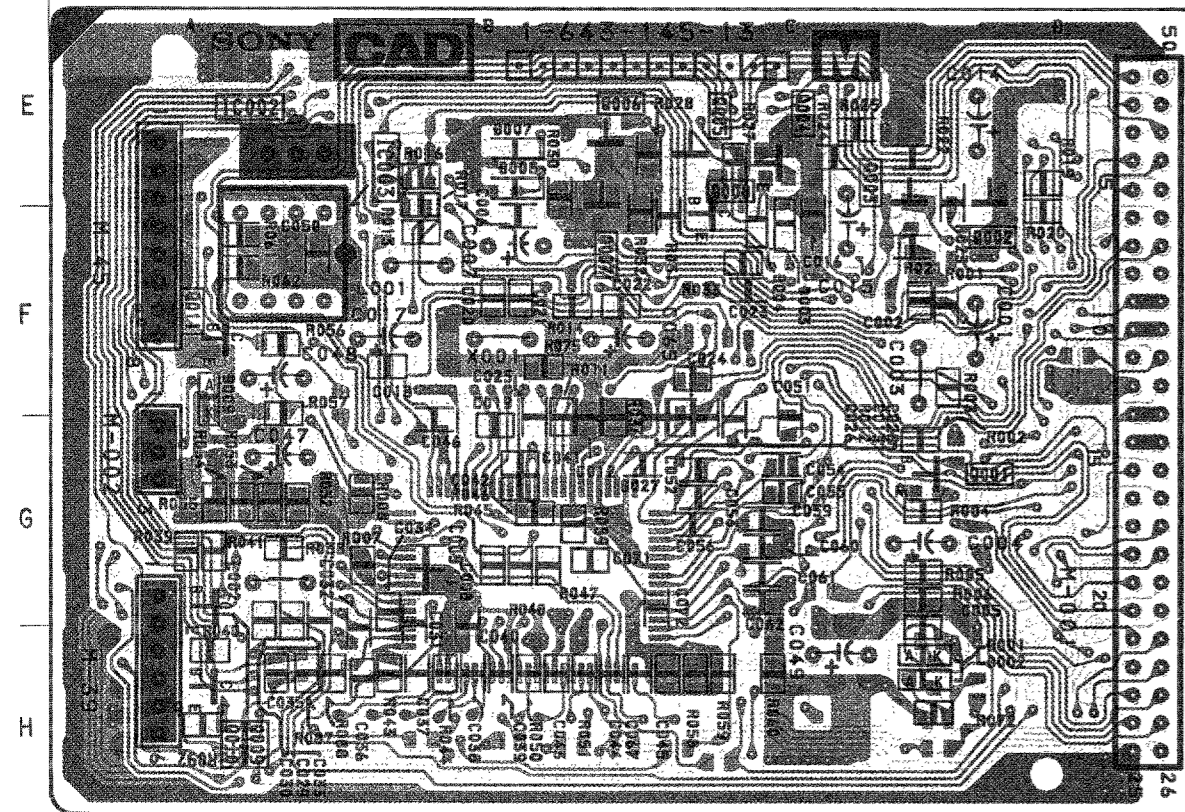


• VC BOARD \* MARK

Ref. No.	27INCH	32INCH
C1812	0.16 200V	0.24 200V
C1813	0.047 200V	Not mounted
R1806	6.8K 1/4W	8.2K 1/4W
R1816	27K 1/4W	47K 1/4W




— M BOARD —

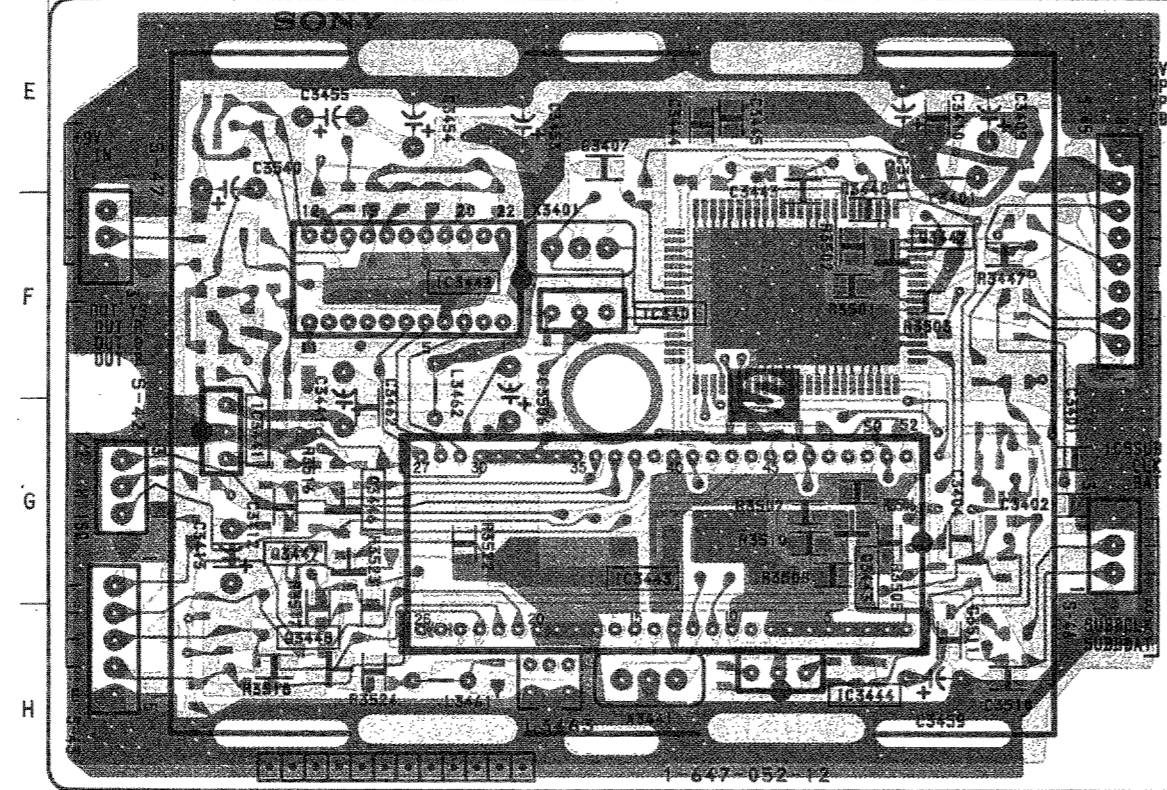


IC	
IC001	C - 1
IC002	D - 2, E - 2
TRANSISTOR	
Q001	G - 5
Q009	G - 1
Q010	H - 1
Q011	F - 1
Q012	C - 5
Q013	A - 5
Q014	C - 4
DIODE	
D001	H - 5
D002	H - 5
D009	F - 1
D010	A - 4
D011	D - 2
D012	B - 4
D014	A - 1
D015	B - 4

Note :



-  : Pattern from the side which enables seeing.
-  : Pattern of the rear side.

- S BOARD -

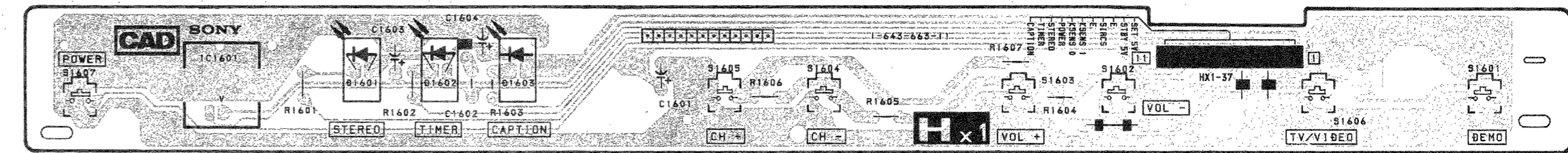


<b>IC</b>	
IC3401	C - 3, F - 3
IC3402	C - 4
IC3441	B - 1, G - 1
IC3442	C - 2, F - 2
IC3443	B - 3, G - 3
IC3444	A - 4, H - 4
<b>TRANSISTOR</b>	
C3441	C - 1
C3444	B - 5
<b>DIODE</b>	
D3444	B - 5

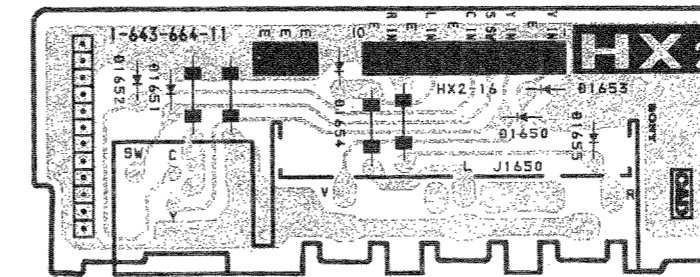
Note :

-  : Pattern from the side which enables seeing.
-  : Pattern of the rear side.

- HX1 BOARD -

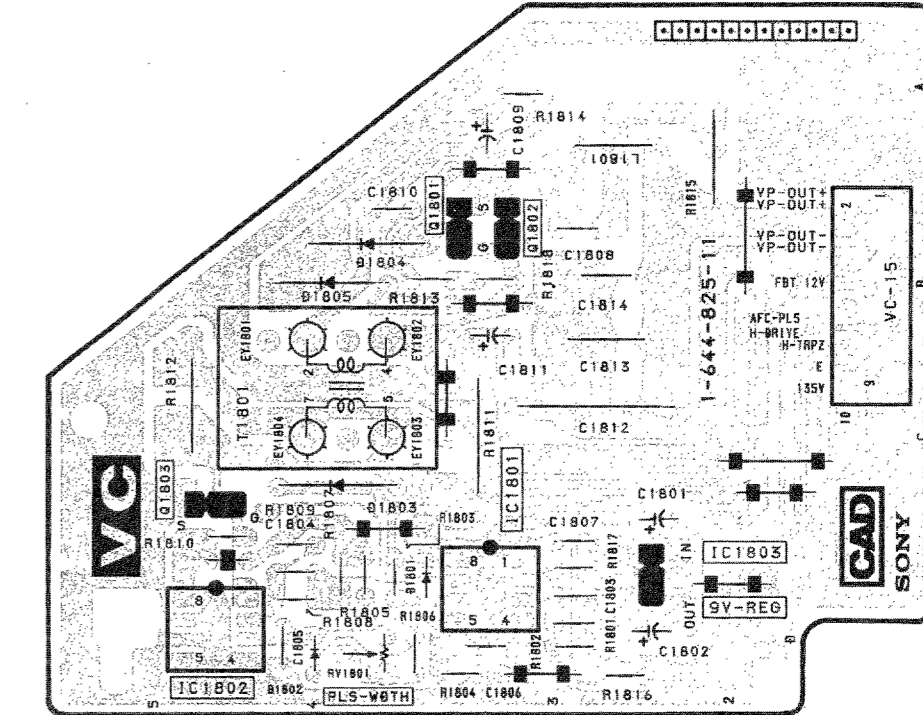
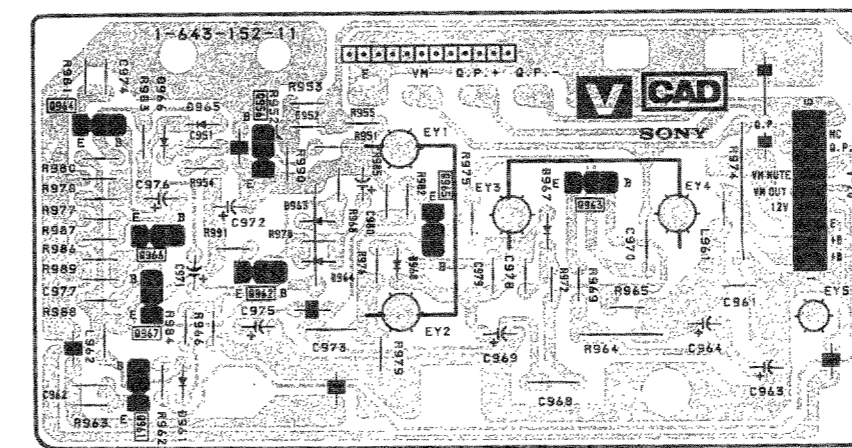


— HX2 BOARD —



— VC BOARD —

— V BOARD —



P2

MPX PICTURE IN  
PICTURE CIRCUIT

P3

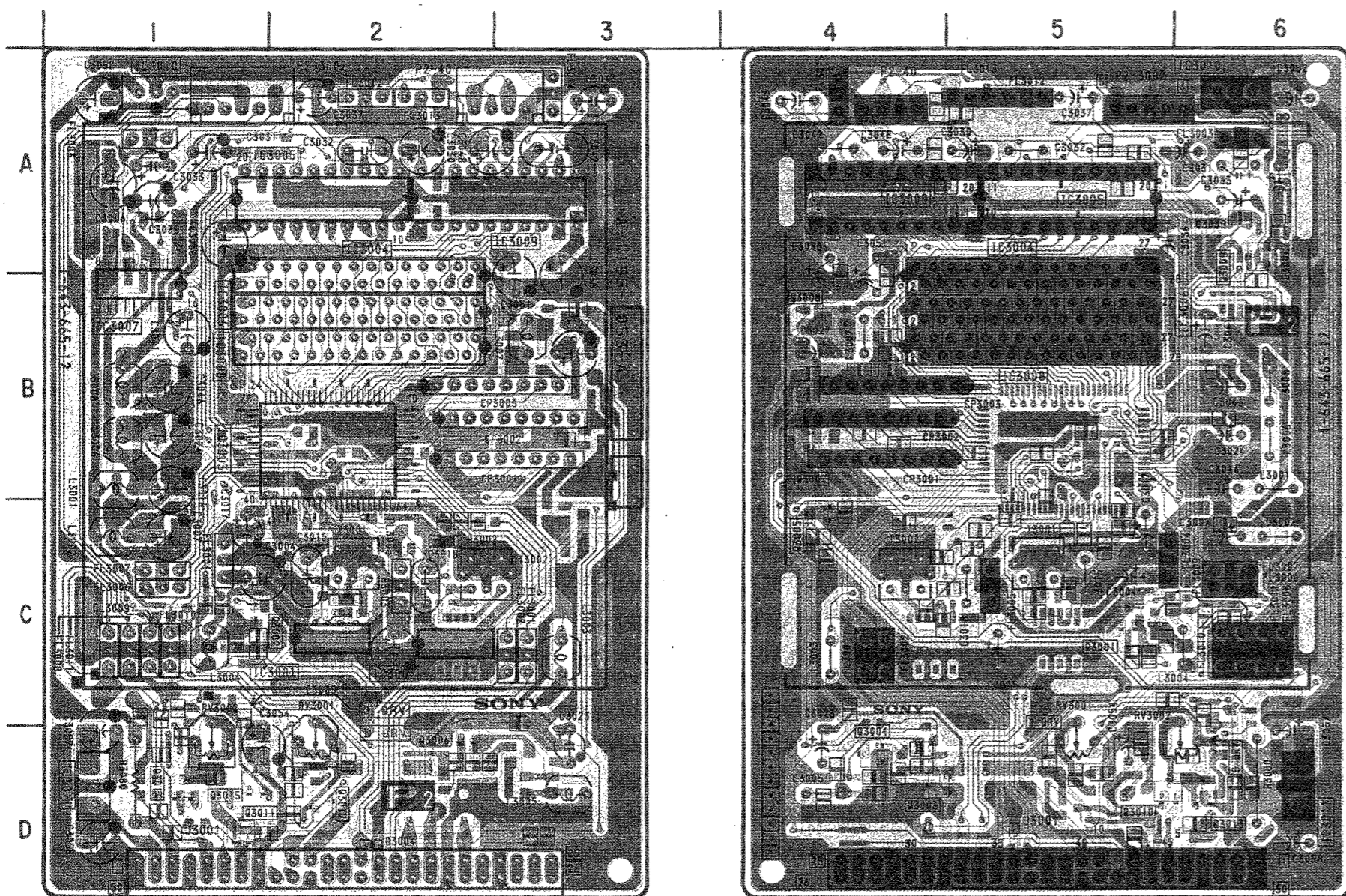
2ND CONT,  $\mu$ -CON FOR PIP,  
2ND TUNER - VIF/SIF FOR PIP,  
Y/C JUNGLE FOR PIP, ANT SW CONT.

P4

DIGITAL COMB  
FILTER

- P2 BOARD -

IC	
IC3001	C-2
IC3002	C-2
IC3003	B-2
IC3004	A-2, B-5
IC3005	A-2, A-5
IC3006	B-2, B-5
IC3007	B-1
IC3008	B-2, B-5
IC3009	A-3, A-4
IC3010	A-1, A-6
IC3011	D-1, D-6
TRANSISTOR	
Q3001	C-5
Q3002	C-1
Q3003	D-4
Q3004	D-4
Q3005	C-4
Q3006	D-2
Q3007	B-4
Q3008	B-4
Q3009	A-6
Q3010	D-5
Q3011	D-1
Q3012	D-2
Q3013	D-6
Q3014	D-1
Q3015	D-1
DIODE	
D3002	C-2
D3003	C-2
D3004	D-2
VARIABLE RESISTOR	
RV3001	D-2, D-5
RV3002	D-1, D-6



Note :

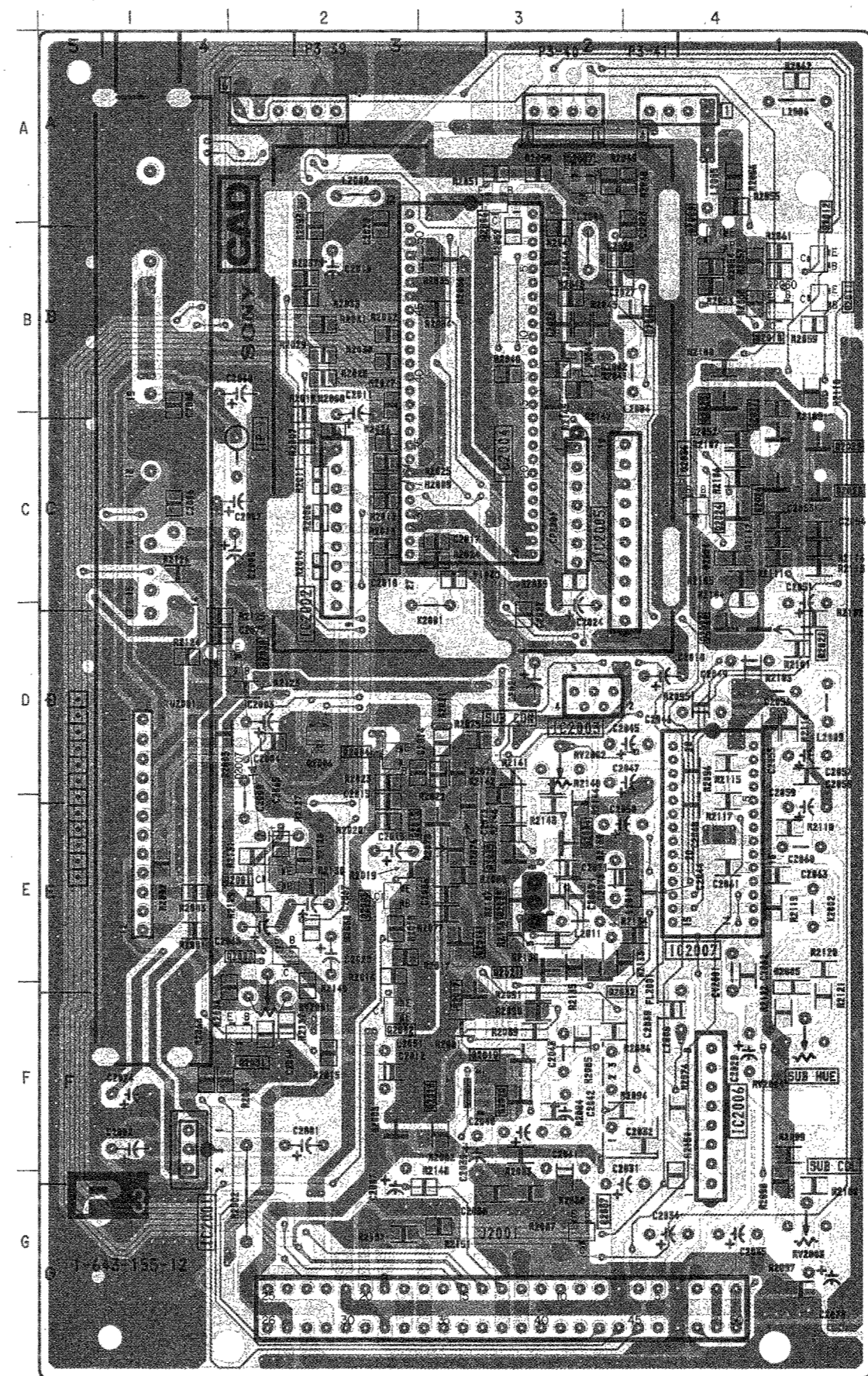
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

IC	
IC2001	F-1
IC2002	C-2
IC2003	D-3
IC2004	C-2
IC2005	C-3
TRANSISTOR	
Q2001	E-1
Q2002	F-2
Q2003	E-3
Q2004	D-3
Q2005	B-3
Q2006	A-3
Q2007	A-3
Q2008	E-1
Q2009	A-9
Q2010	B-4
Q2011	B-4
Q2012	B-4
Q2030	D-1
Q2031	F-1
Q2036	C-4
Q2037	G-3
DIODE	
D2006	D-2
D2007	D-1
VARIABLE RESISTOR	
RV2001	F-1

Note :

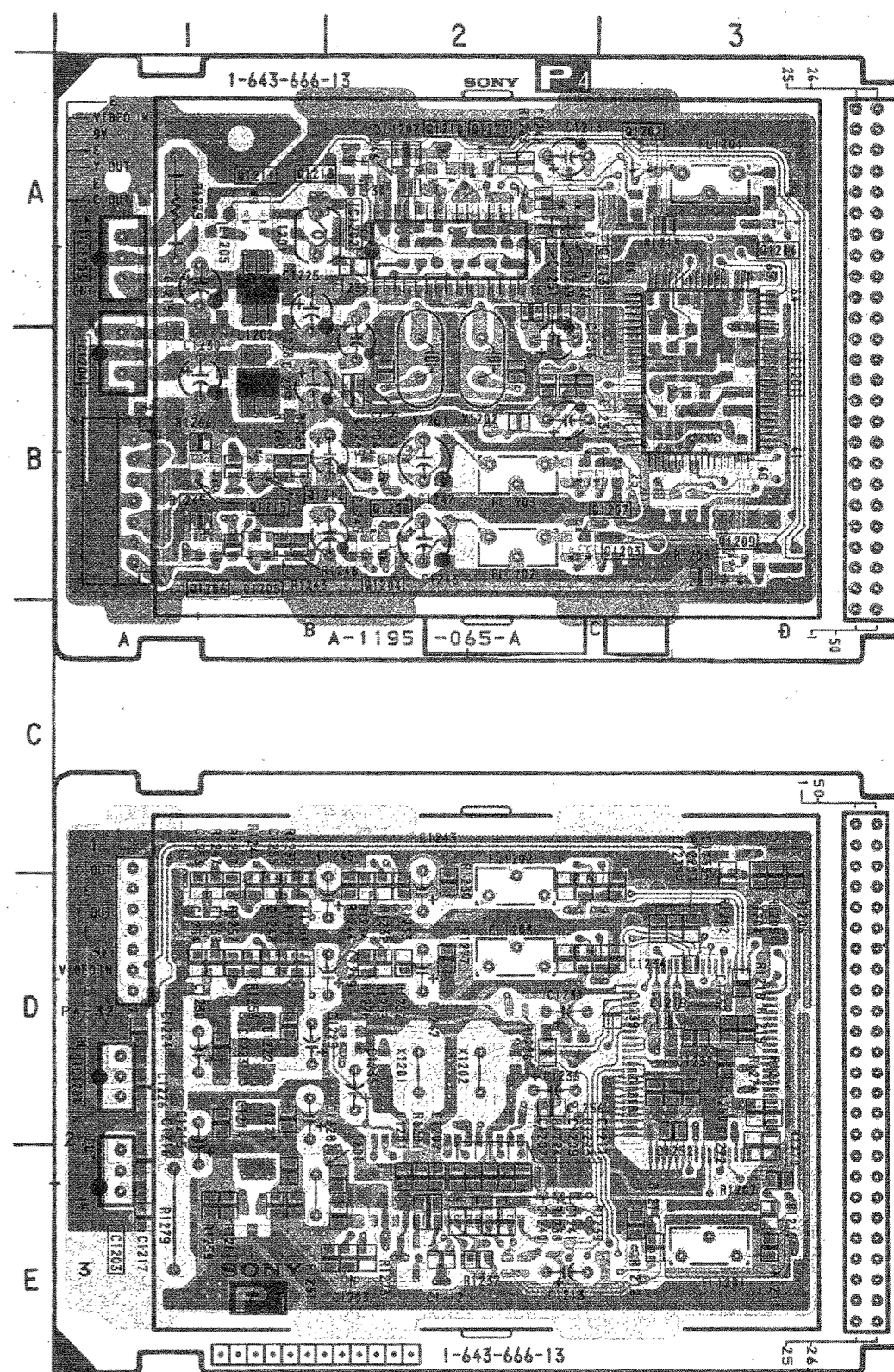
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

- P3 BOARD -



IC	
IC1201	B-3
IC1202	A-2
IC1203	A-1, E-1
IC1204	B-1, D-1
TRANSISTOR	
Q1202	A-3
Q1203	B-2
Q1204	B-2
Q1205	B-1
Q1206	B-1
Q1207	B-2
Q1208	B-2
Q1209	B-3
Q1211	A-1
Q1212	B-1
Q1213	A-2
Q1214	A-3
Q1215	B-1
Q1218	A-2
Q1220	A-2

- P4 BOARD -

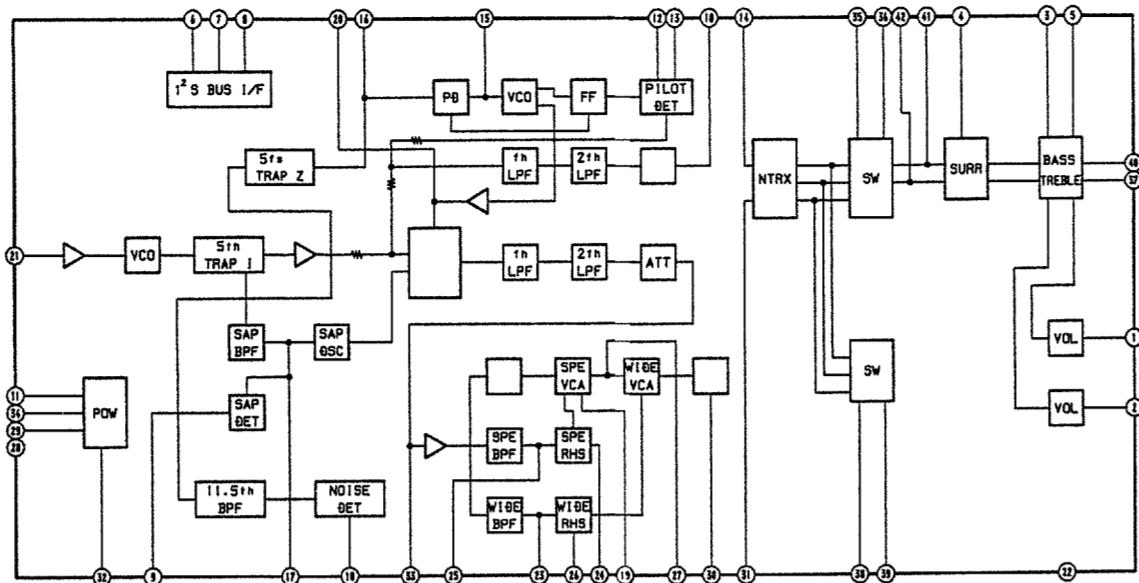


Note :

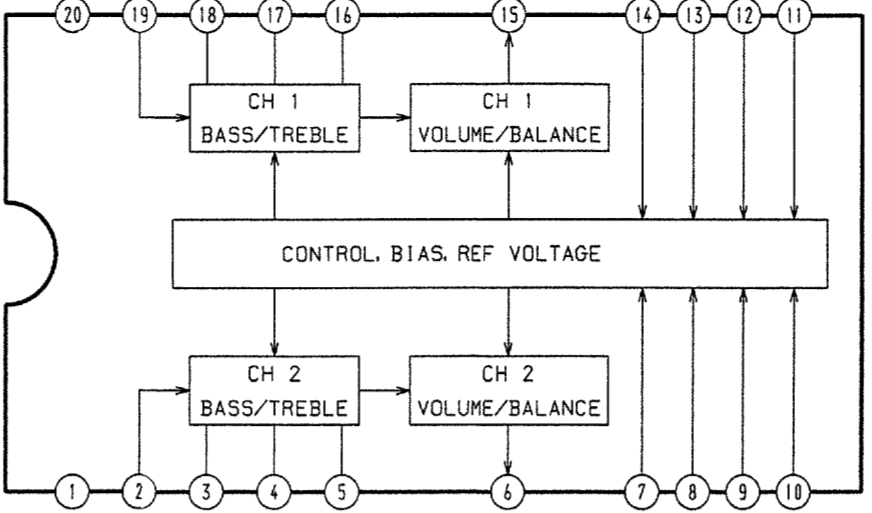
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.



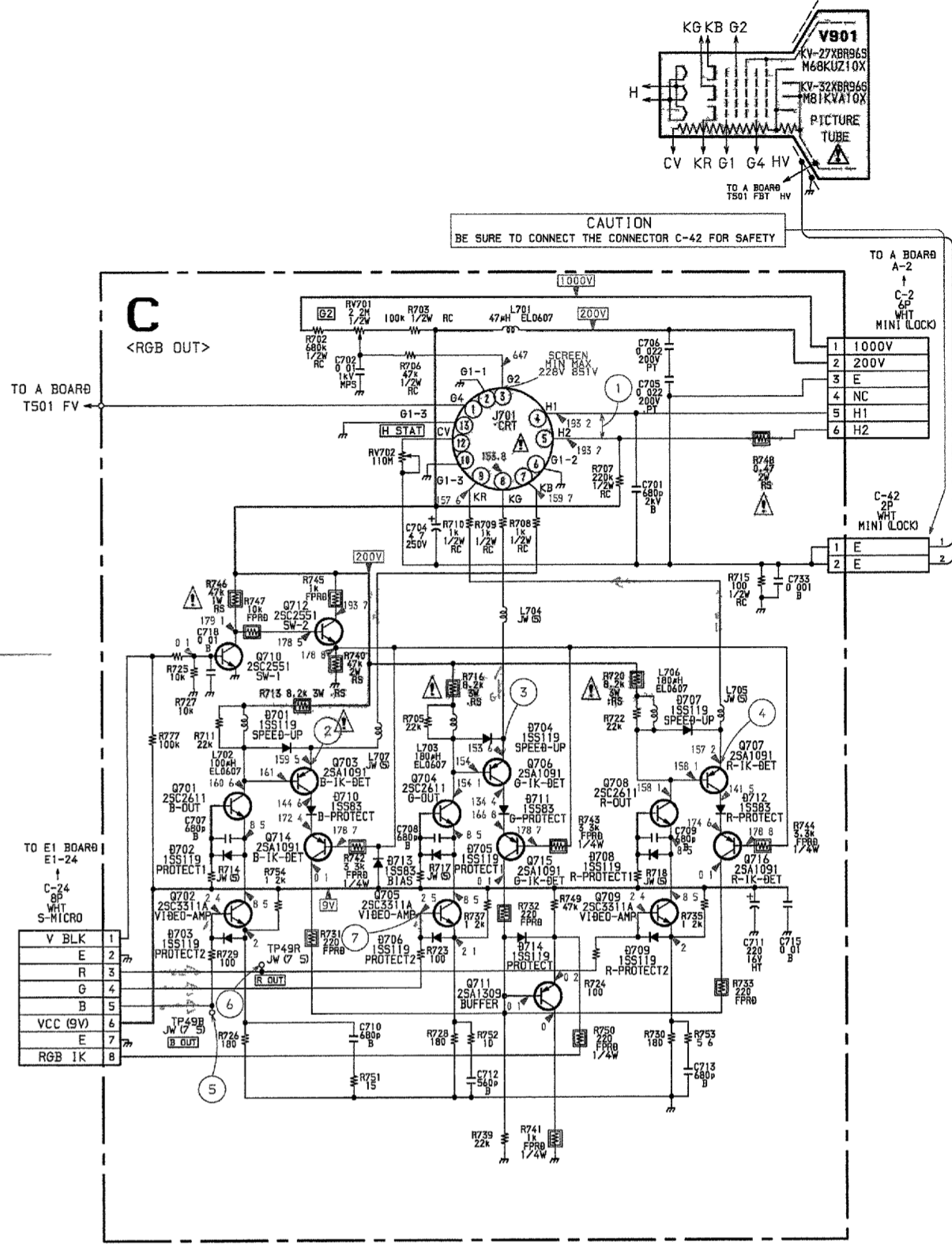
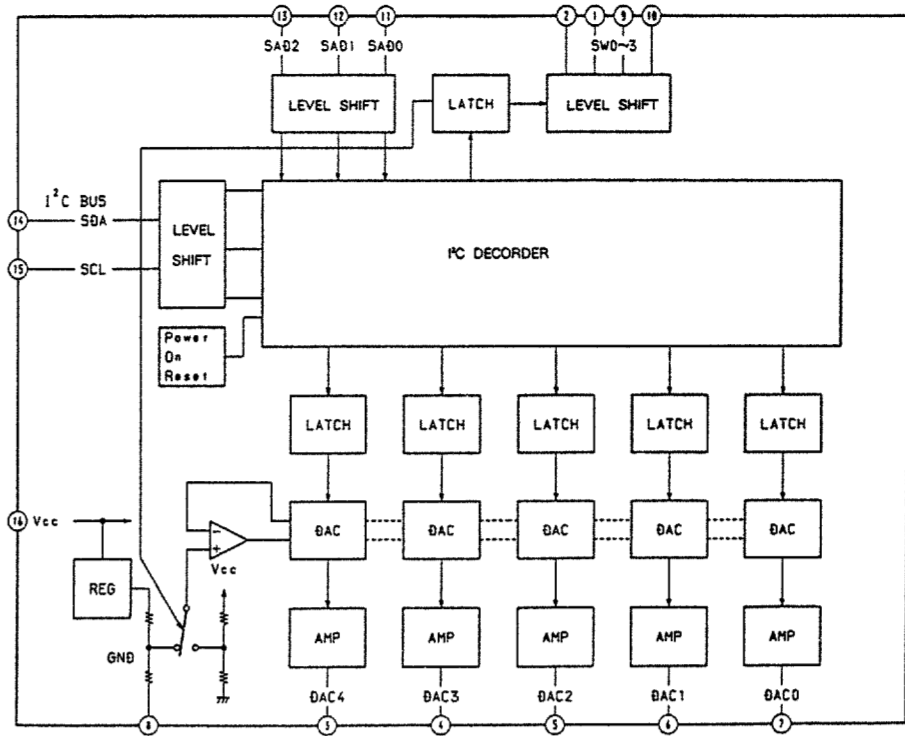
• Y2 BOARD IC406 CXA1264AS



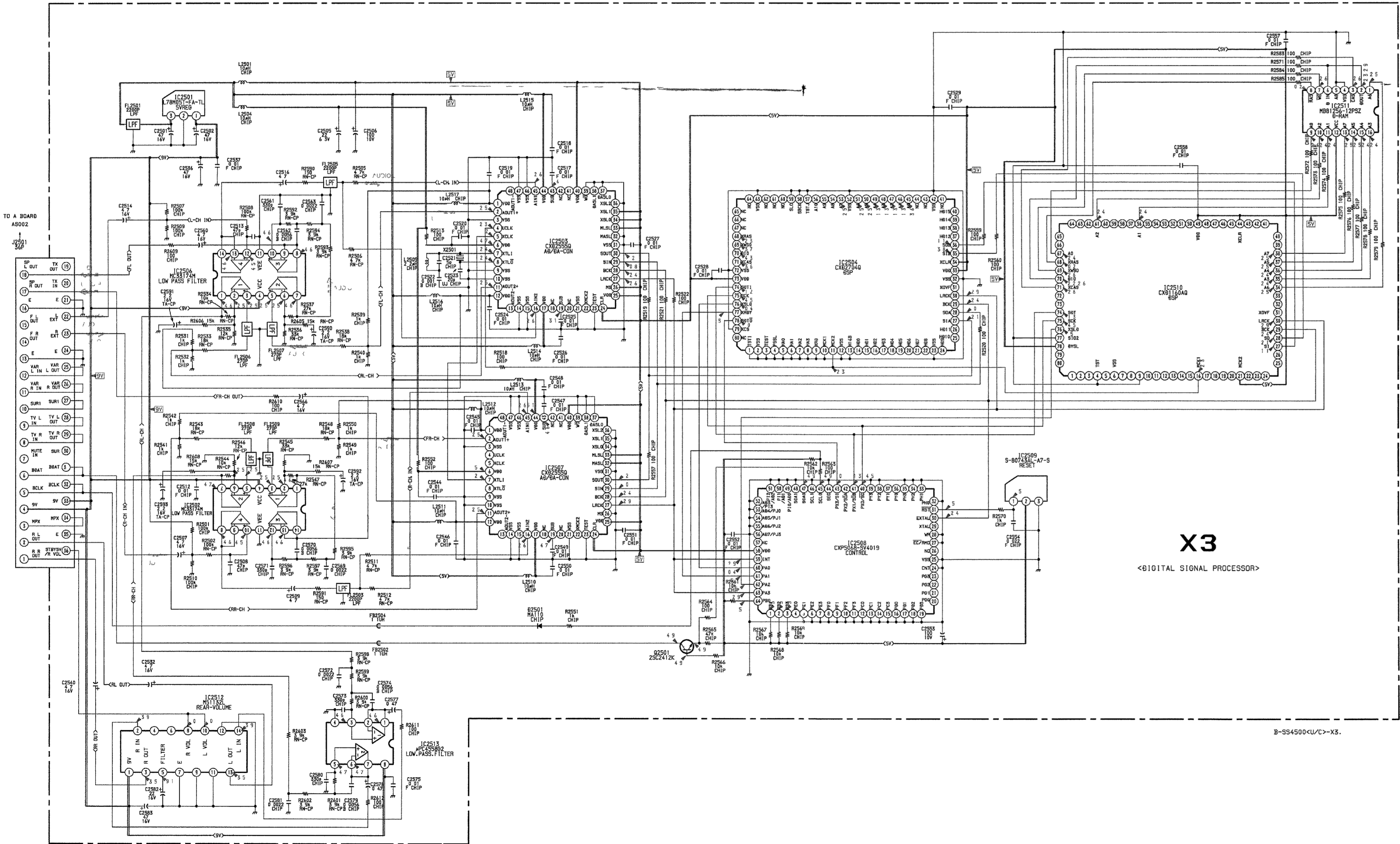
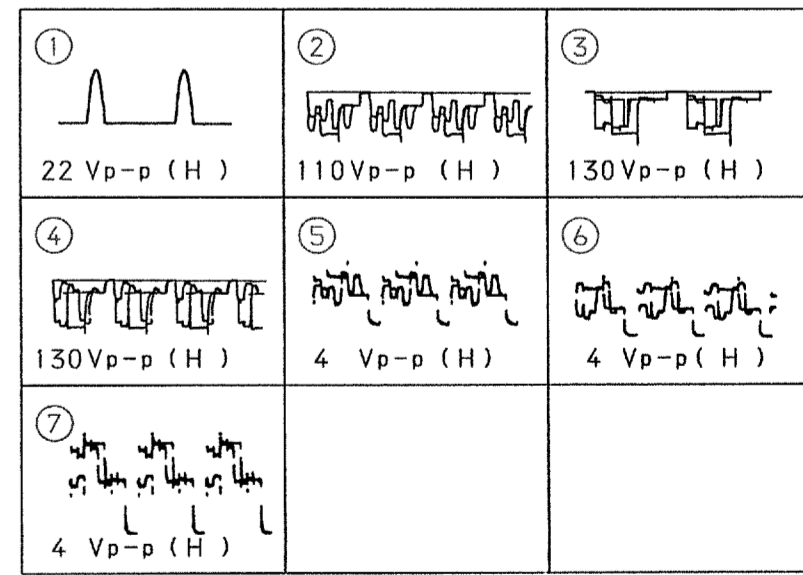
• Y2 BOARD IC407 TA8184P



• Y2 BOARD IC408 CXA1315P



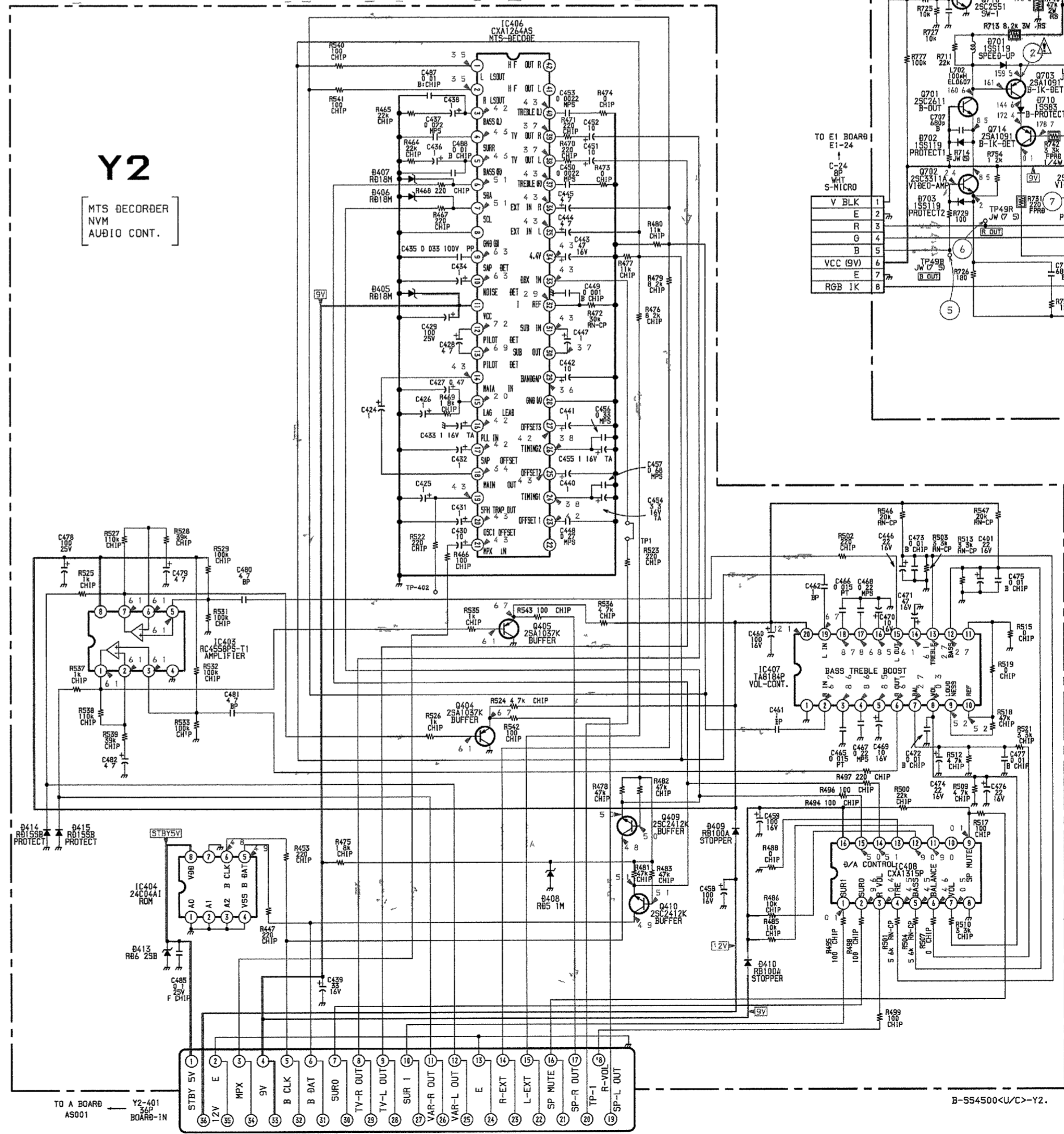
• C BOARD WAVEFORMS



X3

<DIGITAL SIGNAL PROCESSOR>

B-554500<U/C>-X3.



Y2

MTS DECODER  
NVM  
AUDIO CONT.

B-554500<U/C>-Y2.

X3

DIGITAL SIGNAL  
PROCESSOR

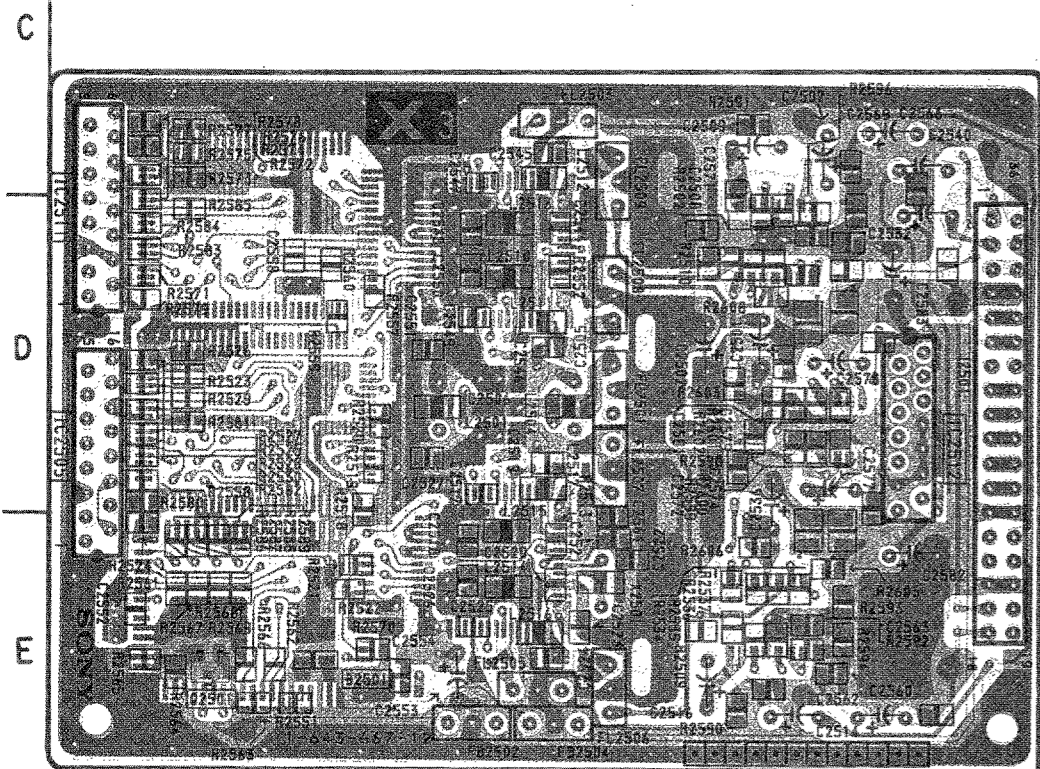
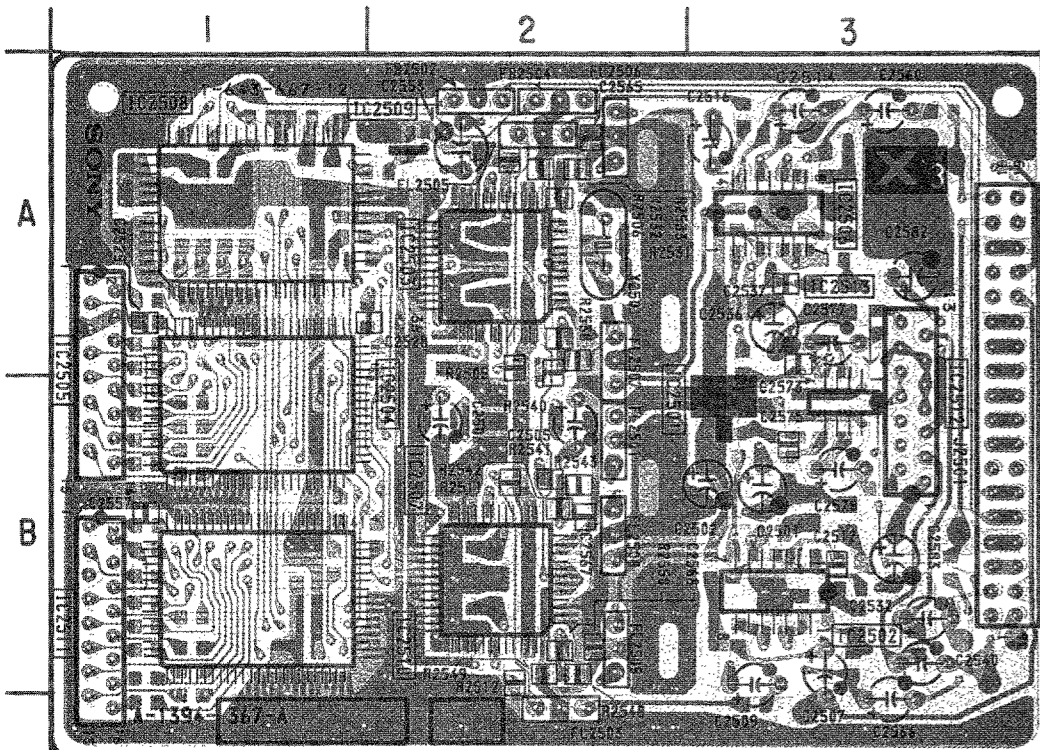
Y2

MTS DECODER,  
NVM, AUDIO CONT.

C

[R G B OUT]

- X3 BOARD -

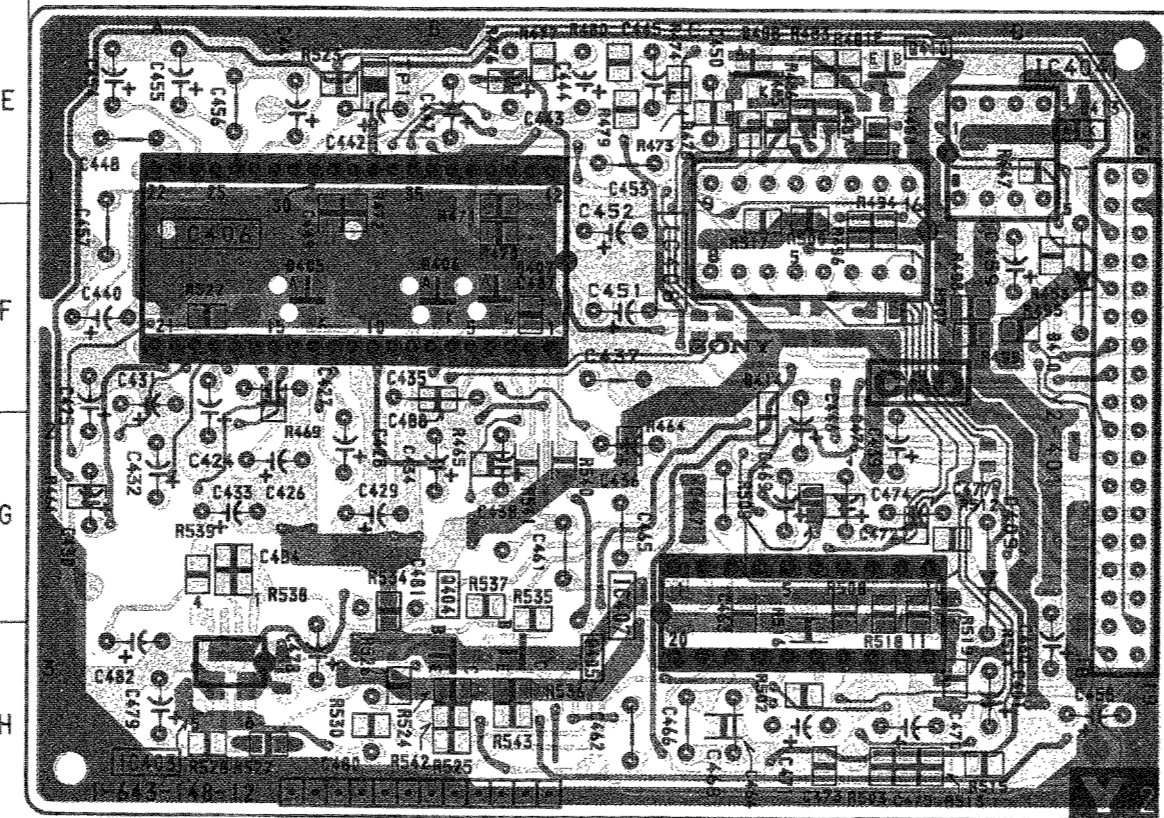
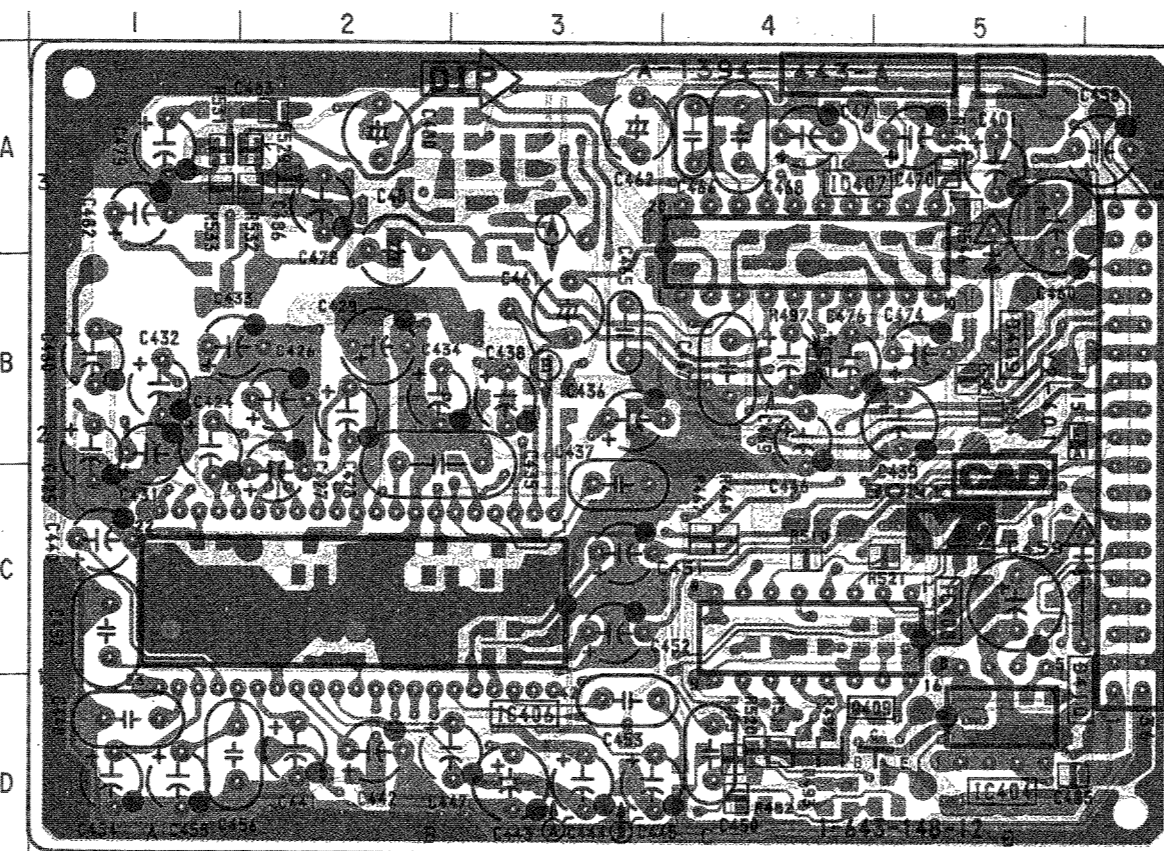


Note :

- Pattern from the side which enables seeing.
- Pattern of the rear side.

IC	
IC2501	B-3
IC2502	B-3
IC2503	A-2
IC2504	B-1
IC2506	A-3
IC2507	B-2
IC2508	A-1
IC2509	A-2
IC2510	B-1
IC2511	B-1, D-1
IC2512	B-3, D-3
IC2513	B-3
TRANSISTOR	
Q2501	E-1
DIODE	
D2501	E-1

- Y2 BOARD -

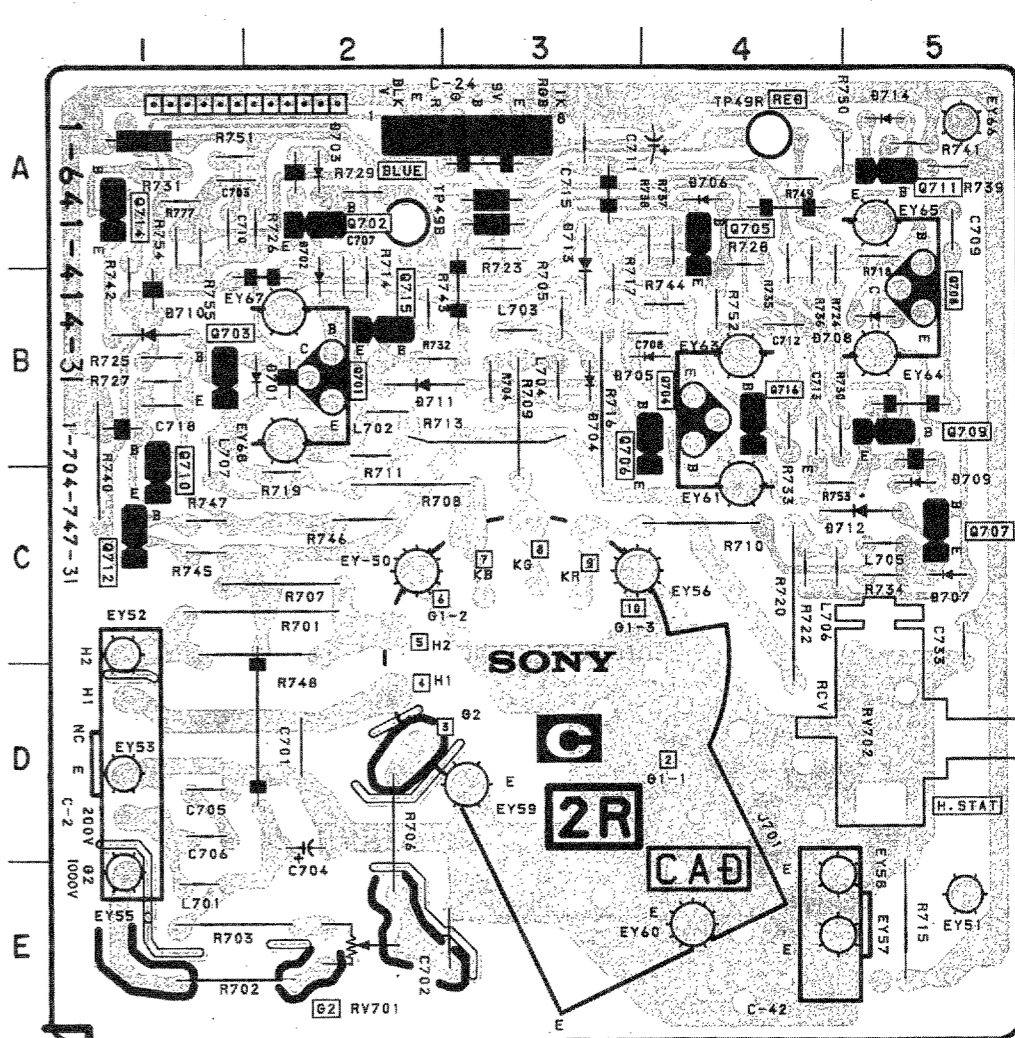


Note :

- Pattern from the side which enables seeing.
- Pattern of the rear side.

IC	
IIC403	H-1
IC404	D-5, E-5
IC406	C-2, F-2
IC407	A-4, G-4
IC408	C-4, F-4
TRANSISTOR	
Q404	H-3
Q405	H-3
Q409	D-5
Q410	E-5
DIODE	
D405	F-2
D406	F-2
D407	F-3
D408	E-4
D409	A-5
D410	C-5, F-5
D141	F-4
D415	B-5

- C BOARD -



Note :

- Pattern from the side which enables seeing.
- Pattern of the rear side.

## TRANSISTOR

Q701	B-2
Q702	A-2
Q703	B-1
Q704	B-4
Q705	A-4
Q706	B-3
Q707	C-5
Q708	B-5
Q709	B-5
Q710	B-1
Q711	A-5
Q712	C-1
Q714	A-1
Q715	B-2
Q716	B-4

## DIODE

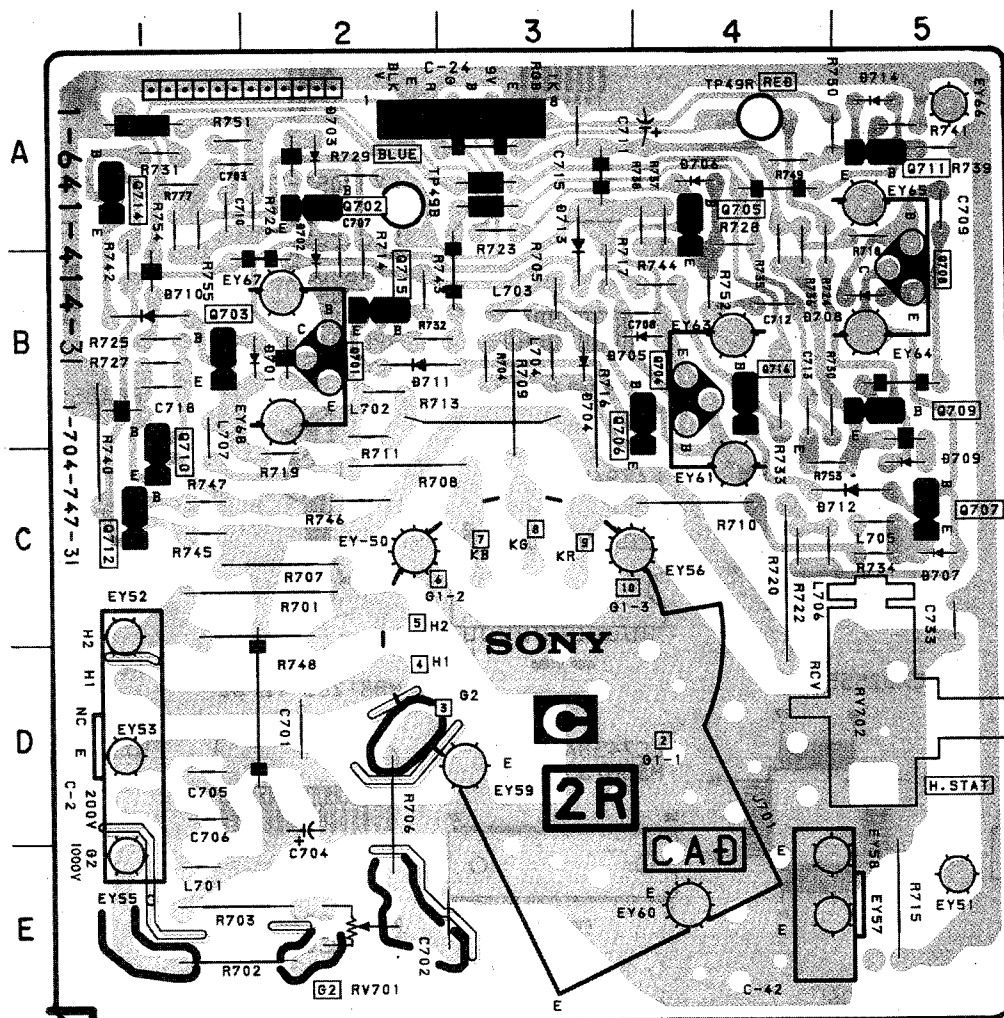
D701	B-2
D702	B-2
D703	A-2
D704	B-3
D705	B-3
D706	A-4
D707	C-5
D708	B-5
D709	C-5
D710	B-1
D711	B-2
D712	C-5
D713	A-3
D714	A-5

VARIABLE  
RESISTOR

RV701	E-2
RV702	D-5

- C BOARD -

- 1
- 5, E-5
- 2, F-2
- 4, G-4
- 4, F-4
STOR
- 3
- 3
- 5
- 5
E
- 2
- 2
- 3
- 4
- 5
- 5, F-5
- 6
- 4
- 5



Note :

- - - : Pattern from the side which enables seeing.
- - - : Pattern of the rear side.

TRANSISTOR

Q701	B-2
Q702	A-2
Q703	B-1
Q704	B-4
Q705	A-4
Q706	B-3
Q707	C-5
Q708	B-5
Q709	B-5
Q710	B-1
Q711	A-5
Q712	C-1
Q714	A-1
Q715	B-2
Q716	B-4

DIODE

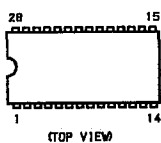
D701	B-2
D702	B-2
D703	A-2
D704	B-3
D705	B-3
D706	A-4
D707	C-5
D708	B-5
D709	C-5
D710	B-1
D711	B-2
D712	C-5
D713	A-3
D714	A-5

VARIABLE RESISTOR

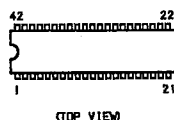
RV701	E-2
RV702	D-5

# 6-8.SEMICONDUCTORS

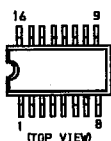
CXA1228S



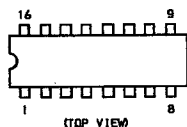
CXA1264AS



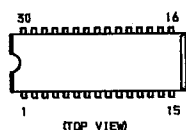
CXA1315M  
MC33174M  
MC74HC4053F



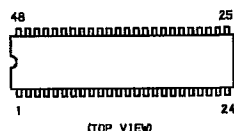
CXA1315P  
CXA1526P



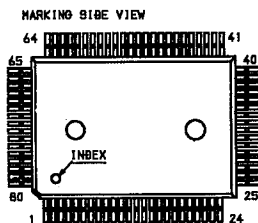
CXA1387S



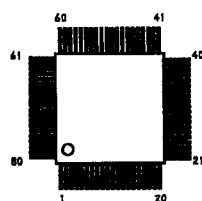
CXA1465AS  
CXA1545S



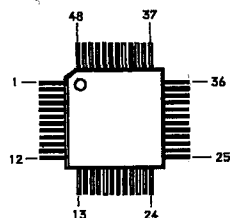
CXD1160AQ  
CXD1220AQ  
CXD2704Q  
M37201M6-A18FP  
TMC73C247-10



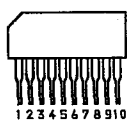
CXD2023Q



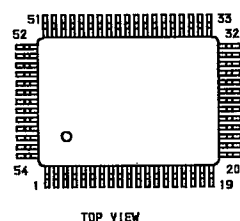
CXD2555Q



CXK1006L



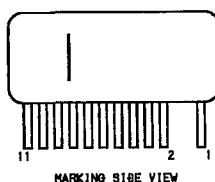
CXP5068H-205Q



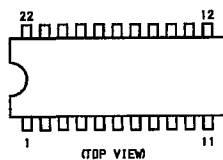
CX20061



DM-44



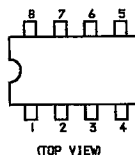
LA7945



LC7458A-02  
MB88733-143



LM358P  
LM393P  
μPC358C  
μPC393C  
μPC4557C  
24C04A1/P



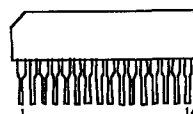
L78LR05B-MA



L78M05T-FA  
NJM7805FA  
NJM7812FA  
RC7812FA  
TA78L09S  
TA7805S  
TA7812S  
μPC7812H  
μPC7893AHF



MB81256-12PSZ



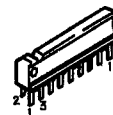
MC74HC04AF  
SN74HC05ANS



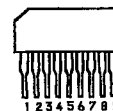
MN1280-S



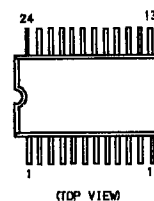
M5M4C500L-10  
M51132L



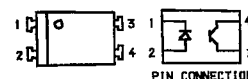
NJM2903S



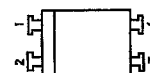
PCAB510T-012



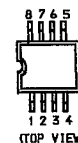
PC817-B



PS2501-1LB



RC4558PS  
μPC4558G2  
μPC4570G2-E1



RC78L05A



A perspective view of a 7-pin DIN connector. It is a rectangular block with a circular hole on its top surface. Seven pins extend from the bottom, numbered 1 through 7 from left to right. Pin 1 is the shortest, while pins 2 through 7 are of increasing height.

A diagram of a three-terminal component, possibly a transistor, with terminals labeled C, B, and E.

A diagram of a standard three-prong electrical plug. Label 'B' points to the ground prong, 'C' points to the neutral prong, and 'D' points to the line prong.

Diagram of a battery cell. The left terminal is labeled **ANODE** and the right terminal is labeled **CATHODE**.

A schematic diagram of a bipolar electrode. It consists of a central vertical tube with two internal electrodes. The left electrode is labeled 'LONG' and the right is labeled 'SHORT'. Below the 'LONG' electrode is the label 'ANODE' and below the 'SHORT' electrode is the label 'CATHODE'.

A perspective view of a 3-pin DIN connector. The connector has a rectangular body with a circular hole on top. Three pins extend from the bottom. The pins are labeled with numbers: '1' for the leftmost pin, '2' for the middle pin, and '4' for the rightmost pin. The label 'X' is positioned below the middle pin.

A diagram of a three-pin DIN connector. The connector has a rectangular body with a circular feature on top. Three pins extend from the bottom. Arrows point to the pins with labels: 'IN' for the left pin, 'GND' for the middle pin, and 'OUT' for the right pin.

A diagram of a 5-pin D-sub connector. The pins are numbered 1 to 5. Pin 1 is the top-left pin, pin 2 is the top-right pin, pin 3 is the bottom-left pin, pin 4 is the bottom-right pin, and pin 5 is the central pin.

A diagram of a 16-pin connector. On the left, there are four pins labeled 4, 5, 4, and 3 from top to bottom. On the right, there are four pins labeled 1, 2, 3, and 4 from top to bottom. A circular feature is located in the upper right quadrant of the connector body.

A diagram of a three-pin electrical plug. The top part is a rectangular body with a circular hole on the side. Three pins extend from the bottom. The left pin is labeled 'B', the middle pin is labeled 'C', and the right pin is labeled 'E'.

A 3D perspective drawing of a rectangular block. On the bottom edge of the front face, three points are marked with small circles and labeled B, C, and D from left to right. Point B is at the bottom-left corner, point C is in the middle, and point D is at the bottom-right corner.

A diagram of a three-core cable. It consists of a central core labeled 'G' (Ground) and two outer cores labeled 'S' (Signal). The three cores are bundled together within a common outer jacket.

A diagram of a cathode ray tube. It consists of a vertical glass tube. Inside the tube, there is a cylindrical cathode at the bottom and a thin wire anode extending from the top. The cathode is labeled 'CATHODE' and the anode is labeled 'ANODE'.

CATHODE

ANODE

A diagram showing a piston and crank mechanism. A vertical rod (the piston) is connected to a horizontal crank arm. The crank arm is attached to a central shaft (the crank). The piston rod has a small circular feature near the top, possibly a pin or a seal. The crank arm is shown in a horizontal position, and the piston rod is vertical.

A diagram of a cathode ray tube. It shows a vertical glass tube with a curved top. Inside, there are two electrodes: a larger, rounded one at the bottom labeled 'cathode' and a smaller, pointed one at the top labeled 'anode'. Arrows point from the text labels to their respective electrodes.

A diagram of a three-wire cable. The cable has three parallel conductors. The leftmost conductor is labeled 'Output' with an arrow pointing to it. The middle conductor is labeled 'Ground' with an arrow pointing to it. The rightmost conductor is labeled 'Vcc' with an arrow pointing to it.

The diagram shows a dual inverter circuit. It consists of two NPN transistors at the top and two PNP transistors at the bottom. The NPN transistors have their emitters connected to a common point, and their collectors connected to the output terminals. The PNP transistors have their emitters connected to a common point, and their collectors connected to the output terminals. The circuit is designed to provide a 100V output.

A diagram of a three-pin electrical plug. The pins are labeled E, C, and B from left to right. The E pin is the longest, the C pin is the shortest, and the B pin is of intermediate length.

CATHODE                      ANODE

A perspective drawing of a rectangular component with four pins. Pin 1 is at the top-left corner, pin 2 is at the top-right corner, pin 3 is at the bottom-left corner, and pin 4 is at the bottom-right corner.

Diagram of a vacuum tube with labels 'ANODE' and 'CATHODE'.

(TOP VIEW)

A diagram of a three-terminal device, possibly a transistor, with terminals labeled B, C, and E.

Diagram of a letter sign with the letter 'A' and the text 'LETTER SIGN'.

A diagram of a 3-pin DIN connector. The connector is a rectangular block with three pins extending downwards. The pins are labeled from left to right as B, C, and E.

Diagram illustrating the components of a corrosion cell:

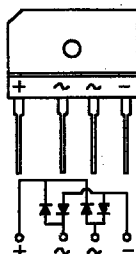
- anode**: The bolt (labeled 'anode') is the site of oxidation.
- cathode**: The nut (labeled 'cathode') is the site of reduction.

A diagram of a 12-pin connector. It features a rectangular body with two circular mounting holes on the top edge. Below the body, there are 12 vertical pins. The pins are numbered 1 through 12, starting from the left and ending on the right.

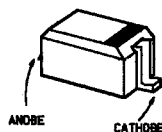
A diagram of a three-pin electrical plug. The top part is a rectangular housing. Three pins extend downwards from the housing. The left pin is labeled 'E', the middle pin is labeled 'F', and the right pin is labeled 'T'.

NS4  
N20R  
A38-006  
A82-004  
A83-006  
A85-009  
-100A  
2ES-B2  
3ES-B2  
2.2ES-B2  
50ES-B2  
3.3ES-B2  
33ES-B2  
39ES-B2  
39ES-B3  
39ES-B4  
5.1ES-B2  
5.6ES-B1  
5.6ES-B3  
6.2ES-B2  
6.8ES-B1  
7.5ES-B2  
9.1ES-B  
9.1ES-L  
P02-20EL-6394  
S119

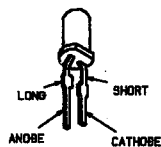
Ø6SB60L



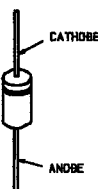
RØ15SB  
RØ5.6SB  
RØ6.2SB  
1SS352



TLR124



EGP20G  
EL1Z  
ERB44-06  
GP08Ø  
RGP10GPKG3  
RGP15GPKG23  
RU30A  
1SS83



RØ9.1EW

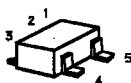


RGP02-17EL-6433

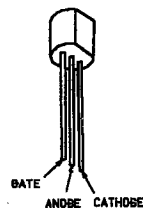


OSC4MR

FMN1

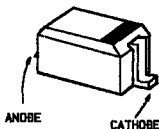


SHOR3Ø42



S4MF

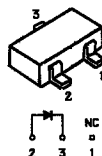
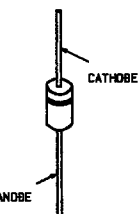
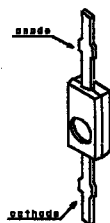
MA110



S6M-F  
B24-06Ø  
3AM  
L20UF

MA3130  
RØ18M-B1  
RØ3.3M-B1  
RØ5.1M-B3  
RØ6.8M-B1

1T33



SECTION 7  
EXPLODED VIEWS

## NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

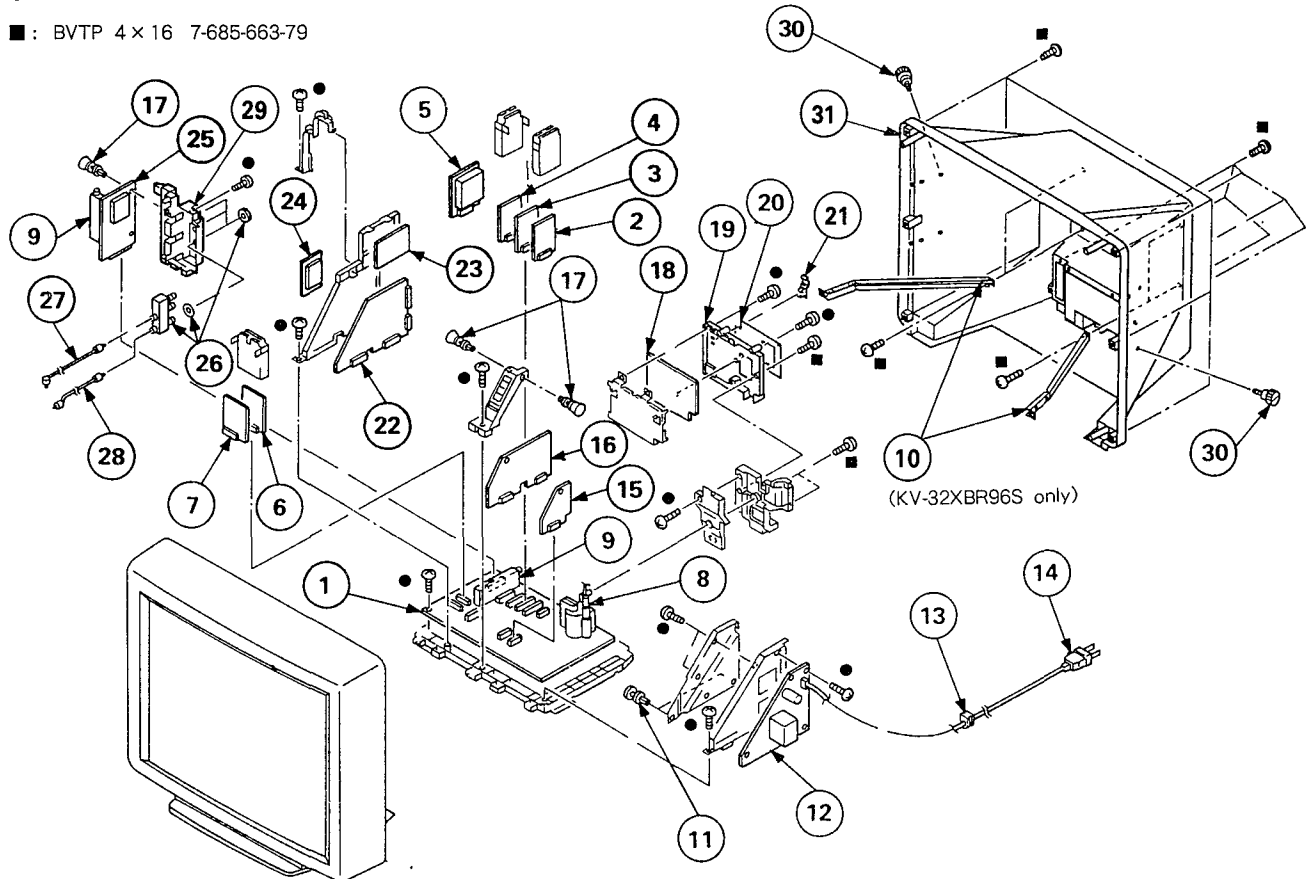
The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié

## 7-1. CHASSIS

●: BVTP 3×12 7-685-648-79

■: BVTP 4×16 7-685-663-79

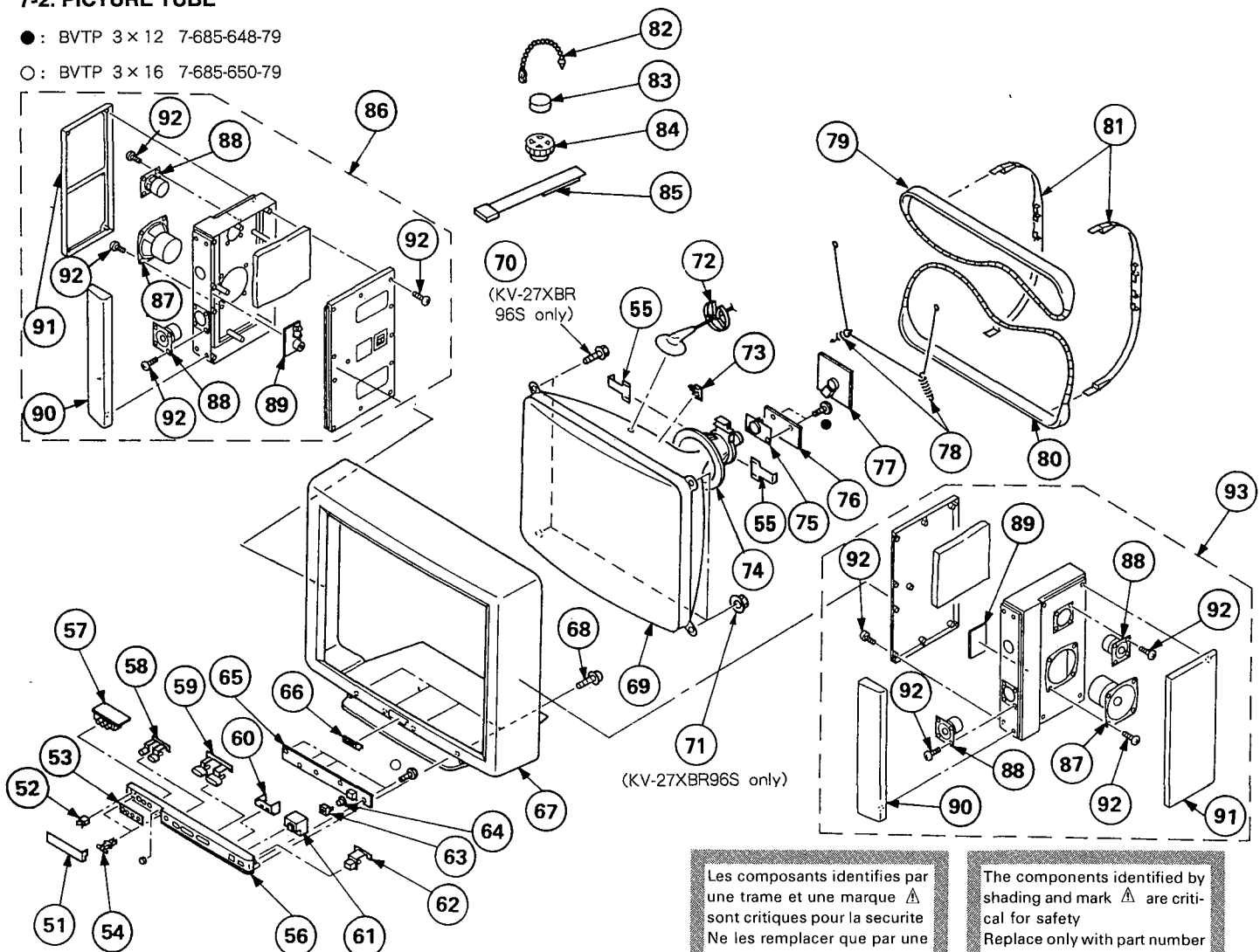


REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
1	*A-1297-164-A	A BOARD, COMPLETE		15	*A-1347-079-A	VC BOARD, COMPLETE (KV-27XBR96S(U/C))	
	*A-1297-165-A	A BOARD, COMPLETE	(KV-32XBR96S(U/C)) 2~7		*A-1347-081-A	VC BOARD, COMPLETE (KV-32XBR96S(U/C))	
2	*A-1346-133-A	E1 BOARD, COMPLETE		16	*A-1341-664-A	D BOARD, COMPLETE (KV-27XBR96S(U/C))	
			(KV-27XBR96S(U/C)) 2~7		*A-1341-678-A	D BOARD, COMPLETE (KV-32XBR96S(U/C))	
3	*A-1346-136-A	E2 BOARD, COMPLETE		17	*4-397-418-01	RIVET, T TYPE	
4	*A-1306-435-A	M BOARD, COMPLETE		18	*A-1373-422-A	UT BOARD, COMPLETE	
5	*A-1195-067-A	P2 BOARD, COMPLETE		19	4-035-204-11	BRACKET, UT	
6	*A-1394-446-A	X3 BOARD, COMPLETE		20	4-035-982-11	LABEL, UT	
7	*A-1394-442-A	Y2 BOARD, COMPLETE		21	4-329-127-00	CLAMP, CORD	
				22	*A-1373-421-A	U BOARD, COMPLETE	
8	$\Delta$ 1-439-524-11	TRANSFORMER ASSY, FLYBACK (NX-3000A2)		23	*A-1394-421-A	S BOARD, COMPLETE	
			(KV-27XBR96S(U/C))	24	*A-1195-065-A	P4 BOARD, COMPLETE	
	$\Delta$ 1-453-126-11	TRANSFORMER ASSY, FLYBACK (NX-3000A3)		25	*A-1195-069-A	P3 BOARD, COMPLETE	
			(KV-32XBR96S(U/C))	26	$\Delta$ 1-417-178-11	SELECTOR, ANTENNA (AS-2)	
9	$\Delta$ 1-693-102-22	TUNER (BTF-XA401)		27	*1-555-400-00	CABLE, PIN	
10	*4-036-731-01	BRACKET, REAR COVER (KV-32XBR96S(U/C))		28	*1-557-056-31	CABLE, P-P	
11	4-374-303-01	RIVET, NYLON		29	4-035-203-01	TERMINAL BOARD, ANTENNA	
12	*A-1316-160-A	G BOARD, COMPLETE		30	X-4031-013-1	SCREW ASSY, ORNAMENTAL	
13	$\Delta$ 4-334-223-03	GROMMET, AC CORD		31	4-035-007-01	COVER, REAR (KV-32XBR96S(U/C))	
14	$\Delta$ 1-696-002-12	CORD, POWER(WITH NOISE FILTER)			4-037-303-01	COVER, REAR (KV-27XBR96S(U/C))	

## 7-2. PICTURE TUBE

●: BVTP 3 × 12 7-685-648-79

○: BVTP 3 × 16 7-685-650-79



Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

REF.NO.	PART NO	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
51	4-035-199-01	DOOR, FRONT PANEL		74	$\Delta$ 1-451-393-11	DEFLECTION YOKE (Y34EXA)	
52	4-392-036-01	CATCHER, PUSH				(KV-32XBR96S(U/C))	
53	4-036-727-01	LABEL, JACK			$\Delta$ 1-451-394-11	DEFLECTION YOKE (Y29EXA)	
54	3-703-035-12	SHIRT, LID				(KV-27XBR96S(U/C))	
55	4-034-272-01	PLATE, CORRECTION, TLV		75	$\Delta$ 1-452-616-13	NECK ASSY, PICTURE TUBE (NA323)	
56	4-035-057-21	PANEL, FRONT		76	*A-1342-220-A	V BOARD, COMPLETE	
57	*1-643-664-11	HX2 BOARD		77	*A-1331-271-A	C BOARD, COMPLETE	
58	4-035-179-01	BUTTON (A), MULTI		78	4-036-329-01	SPRING (B), TENSION	
59	4-035-154-01	BUTTON (B), MULTI		79	$\Delta$ 1-406-586-11	COIL, DEMAGNETIZATION (KV-32XBR96S(U/C))	
60	4-035-120-01	GUIDE, LIGHT, LED			$\Delta$ 1-406-588-11	COIL, DEMAGNETIZATION (KV-27XBR96S(U/C))	
61	4-035-119-01	FILTER (REMOTE CONTROL)		80	$\Delta$ 1-406-587-11	COIL, DEMAGNETIZATION (KV-32XBR96S(U/C))	
62	4-035-153-01	BUTTON, POWER			$\Delta$ 1-406-589-11	COIL, DEMAGNETIZATION (KV-27XBR96S(U/C))	
63	4-381-686-01	BRACKET (B), LIGHT GUIDE		81	4-039-644-01	HOLDER, DGC (KV-32XBR96S(U/C))	
64	*4-388-603-01	GUIDE, LIGHT			4-039-643-02	HOLDER, DGC (KV-27XBR96S(U/C))	
65	*1-643-663-11	HX1 BOARD		82	4-308-870-00	CLIP, LEAD WIRE	
66	3-704-179-01	EMBLEM (NO.9), SONY		83	1-452-032-00	MAGNET, DISK; 10MM $\phi$	
67	4-035-034-01	CABINET (WITH BEZEL) (KV-32XBR96S(U/C))		84	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM $\phi$	
	4-037-302-01	CABINET (WITH BEZEL) (KV-27XBR96S(U/C))		85	X-4306-312-0	PERMALLOY ASSY, CONVERGENCE	
68	4-319-520-11	SCREW, SPECIAL (+PW4X30)		86	1-504-181-11	SPEAKER SYSTEM (13CM)	87~92
69	$\Delta$ 8-733-731-05	PICTURE TUBE (M81KVA10X)		87	9-903-495-01	WOOFER UNIT	
		(KV-32XBR96S(U/C))		88	9-903-496-01	TWEETER UNIT	
	$\Delta$ 8-733-837-05	PICTURE TUBE (M68KU210X)		89	9-903-497-01	NETWORK	
		(KV-27XBR96S(U/C))		90	9-903-498-01	NET (SMALL)	
70	4-390-505-01	SCREW (7), TAPPING (KV-27XBR96S(U/C))		91	9-903-499-01	NET (LARGE)	
71	4-387-204-01	NUT, SPECIAL, PICTURE TUBE		92	9-903-500-01	SCREW	
		(KV-32XBR96S(U/C))		93	1-504-182-11	SPEAKER SYSTEM (13CM)	87~92
72	*3-704-372-01	HOLDER, HV CABLE					
73	3-704-495-01	SPACER, DY					

SECTION 8  
ELECTRICAL PARTS LIST

P4

NOTE:

The components identified by shading and mark  $\Delta$  are critical for safety  
Replace only with part number specified

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité  
Ne les remplacer que par une pièce portant le numéro spécifié

• Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

## RESISTORS

• All resistors are in ohms  
• F : nonflammable

When indicating parts by reference number, please include the board name.

## CAPACITORS

• MF :  $\mu$ F, PF :  $\mu$ F

## COILS

• MMH : mH, UH :  $\mu$ H

• The components identified by  $\boxtimes$  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1195-065-A	P4 BOARD, COMPLETE *****					
		<CAPACITOR>					
C1201	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1253	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1202	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	C1254	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1203	1-163-105-00	CERAMIC CHIP 33PF	5% 50V	C1255	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1204	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V	C1256	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C1205	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V			<CONNECTOR>	
				P4-32	1-564-522-11	PLUG, CONNECTOR 7P	
C1206	1-163-093-00	CERAMIC CHIP 10PF	5% 50V			<FILTER>	
C1207	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	FL1201	1-239-550-11	FILTER, LOW PASS	
C1208	1-163-237-11	CERAMIC CHIP 27PF	5% 50V	FL1202	1-239-550-11	FILTER, LOW PASS	
C1210	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	FL1203	1-239-550-11	FILTER, LOW PASS	
C1211	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V			<IC>	
C1213	1-126-154-11	ELECT 47MF	20% 6.3V	IC1201	8-752-352-20	IC CXD2023Q	
C1214	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC1202	8-752-062-80	IC CXA1686M	
C1215	1-126-154-11	ELECT 47MF	20% 6.3V	IC1203	8-759-112-06	IC UPC78N05H	
C1216	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC1204	8-759-112-06	IC UPC78N05H	
C1217	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V			<COIL>	
C1218	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	L1201	1-408-423-00	INDUCTOR 150UH	
C1219	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	L1202	1-414-042-21	INDUCTOR 18UH	
C1220	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	L1205	1-414-042-21	INDUCTOR 18UH	
C1221	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V			<TRANSISTOR>	
C1222	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	Q1202	8-729-422-27	TRANSISTOR 2SD601A-Q	
C1223	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	Q1203	8-729-216-22	TRANSISTOR 2SA1162-G	
C1224	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	Q1204	8-729-422-27	TRANSISTOR 2SD601A-Q	
C1225	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	Q1205	8-729-422-27	TRANSISTOR 2SD601A-Q	
C1226	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	Q1206	8-729-422-27	TRANSISTOR 2SD601A-Q	
C1227	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	Q1207	8-729-216-22	TRANSISTOR 2SA1162-G	
C1228	1-126-154-11	ELECT 47MF	20% 6.3V	Q1208	8-729-422-27	TRANSISTOR 2SD601A-Q	
C1229	1-126-157-11	ELECT 10MF	20% 6.3V	Q1209	8-729-422-27	TRANSISTOR 2SD601A-Q	
C1230	1-126-157-11	ELECT 10MF	20% 6.3V	Q1211	8-729-216-22	TRANSISTOR 2SA1162-G	
C1231	1-126-157-11	ELECT 10MF	20% 6.3V	Q1212	8-729-422-27	TRANSISTOR 2SD601A-Q	
C1232	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	Q1213	8-729-422-27	TRANSISTOR 2SD601A-Q	
C1233	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	Q1214	8-729-216-22	TRANSISTOR 2SA1162-G	
C1234	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	Q1215	8-729-422-27	TRANSISTOR 2SD601A-Q	
C1235	1-124-257-00	ELECT 2.2MF	20% 50V	Q1218	8-729-216-22	TRANSISTOR 2SA1162-G	
C1237	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	Q1220	8-729-901-01	TRANSISTOR DTC144BK	
C1238	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V			<RESISTOR>	
C1239	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	R1201	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
C1240	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V	R1202	1-216-001-00	METAL GLAZE 10 5% 1/10W	
C1241	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V	R1203	1-216-025-00	METAL GLAZE 100 5% 1/10W	
C1242	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	R1204	1-216-630-11	METAL CHIP 130 0.50% 1/10W	
C1243	1-126-177-11	ELECT 100MF	20% 6.3V	R1205	1-216-639-11	METAL CHIP 330 0.50% 1/10W	
C1245	1-126-157-11	ELECT 10MF	20% 6.3V				
C1246	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				
C1249	1-126-157-11	ELECT 10MF	20% 6.3V				
C1250	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V				
C1251	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				
C1252	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V				

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R1206	1-216-620-11	METAL CHIP	51 0.50% 1/10W	R1284	1-216-025-00	METAL GLAZE	100 5% 1/10W
R1207	1-216-025-00	METAL GLAZE	100 5% 1/10W			<CRYSTAL>	
R1208	1-216-025-00	METAL GLAZE	100 5% 1/10W	X1201	1-577-611-11	OSCILLATOR, CERAMIC	
R1209	1-216-635-11	METAL CHIP	220 0.50% 1/10W	X1202	1-567-878-11	VIBRATOR, CRYSTAL	
R1210	1-216-049-00	METAL GLAZE	1K 5% 1/10W			*****	
						*A-1195-069-A P3 BOARD, COMPLETE	
						*****	
R1211	1-216-043-00	METAL GLAZE	560 5% 1/10W			<CAPACITOR>	
R1212	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	C2001	1-124-910-11	ELECT 47MF	20% 50V
R1213	1-216-001-00	METAL GLAZE	10 5% 1/10W	C2002	1-124-910-11	ELECT 47MF	20% 50V
R1214	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C2003	1-124-119-00	ELECT 330MF	20% 16V
R1215	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W	C2004	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
				C2005	1-124-261-00	ELECT 10MF	20% 50V
R1216	1-216-041-00	METAL GLAZE	470 5% 1/10W	C2006	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R1217	1-216-077-00	METAL GLAZE	15K 5% 1/10W	C2007	1-126-157-11	ELECT 10MF	20% 16V
R1218	1-216-661-11	METAL CHIP	2.7K 0.50% 1/10W	C2008	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R1219	1-216-657-11	METAL CHIP	1.8K 0.50% 1/10W	C2009	1-163-157-00	FILM 0.022MF	5% 50V
R1220	1-216-657-11	METAL CHIP	1.8K 0.50% 1/10W	C2010	1-164-161-11	CERAMIC CHIP 0.0022MF	50V
R1221	1-216-023-00	METAL GLAZE	82 5% 1/10W	C2011	1-126-157-11	ELECT 10MF	20% 16V
R1222	1-216-103-00	METAL GLAZE	180K 5% 1/10W	C2013	1-126-301-11	ELECT 1MF	20% 50V
R1223	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C2014	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
R1224	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C2015	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
R1225	1-216-653-11	METAL CHIP	1.2K 0.50% 1/10W	C2016	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
R1226	1-216-666-11	METAL CHIP	4.3K 0.50% 1/10W	C2017	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
R1228	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	C2018	1-124-465-00	ELECT 0.47MF	20% 50V
R1229	1-216-043-00	METAL GLAZE	560 5% 1/10W	C2019	1-126-103-11	ELECT 470MF	20% 16V
R1230	1-216-075-00	METAL GLAZE	12K 5% 1/10W	C2020	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R1231	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C2021	1-126-157-11	ELECT 10MF	20% 16V
R1232	1-216-689-11	METAL GLAZE	39K 5% 1/10W	C2022	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R1233	1-216-077-00	METAL GLAZE	15K 5% 1/10W	C2023	1-163-119-00	CERAMIC CHIP 120PF	5% 50V
R1234	1-216-035-00	METAL GLAZE	270 5% 1/10W	C2024	1-124-465-00	ELECT 0.47MF	20% 50V
R1235	1-216-037-00	METAL GLAZE	330 5% 1/10W	C2025	1-126-157-11	ELECT 10MF	20% 16V
R1238	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C2026	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
R1239	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C2027	1-163-103-00	CERAMIC CHIP 27PF	5% 50V
R1241	1-216-035-00	METAL GLAZE	270 5% 1/10W	C2028	1-163-107-00	CERAMIC CHIP 39PF	5% 50V
R1242	1-216-043-00	METAL GLAZE	560 5% 1/10W	C2029	1-124-477-11	ELECT 47MF	20% 16V
R1243	1-216-689-11	METAL GLAZE	39K 5% 1/10W	C2031	1-124-910-11	ELECT 47MF	20% 50V
R1244	1-216-025-00	METAL GLAZE	100 5% 1/10W	C2032	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R1245	1-216-001-00	METAL GLAZE	10 5% 1/10W	C2034	1-126-157-11	ELECT 10MF	20% 16V
R1246	1-216-077-00	METAL GLAZE	15K 5% 1/10W	C2035	1-126-157-11	ELECT 10MF	20% 16V
R1247	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C2036	1-163-025-11	CERAMIC CHIP 0.001MF	50V
R1248	1-216-635-11	METAL CHIP	220 0.50% 1/10W	C2037	1-124-477-11	ELECT 47MF	20% 16V
R1249	1-216-025-00	METAL GLAZE	100 5% 1/10W	C2038	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
R1250	1-216-043-00	METAL GLAZE	560 5% 1/10W	C2039	1-124-477-11	ELECT 47MF	20% 16V
R1251	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	C2040	1-124-903-11	ELECT 1MF	20% 50V
R1252	1-216-295-00	METAL GLAZE	0 5% 1/10W	C2041	1-130-475-00	MYLAR 0.0022MF	5% 50V
R1253	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	C2042	1-124-902-00	ELECT 0.47MF	20% 50V
R1254	1-216-035-00	METAL GLAZE	270 5% 1/10W	C2043	1-136-161-00	FILM 0.047MF	5% 50V
R1255	1-216-639-11	METAL CHIP	330 0.50% 1/10W	C2044	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R1256	1-216-035-00	METAL GLAZE	270 5% 1/10W	C2045	1-126-157-11	ELECT 10MF	20% 16V
R1257	1-216-645-11	METAL CHIP	560 0.50% 1/10W	C2046	1-136-169-00	FILM 0.22MF	5% 50V
R1258	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C2047	1-124-463-00	ELECT 0.1MF	20% 50V
R1259	1-216-644-11	METAL CHIP	510 0.50% 1/10W	C2048	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R1260	1-216-075-00	METAL GLAZE	12K 5% 1/10W	C2049	1-136-165-00	FILM 0.1MF	5% 50V
R1261	1-216-025-00	METAL GLAZE	100 5% 1/10W	C2050	1-124-902-00	ELECT 0.47MF	20% 50V
R1262	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C2051	1-126-157-11	ELECT 10MF	20% 16V
R1263	1-216-025-00	METAL GLAZE	100 5% 1/10W	C2052	1-163-129-00	CERAMIC CHIP 330PF	5% 50V
R1264	1-216-025-00	METAL GLAZE	100 5% 1/10W	C2053	1-163-093-00	CERAMIC CHIP 10PF	5% 50V
R1265	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W				
R1266	1-216-001-00	METAL GLAZE	10 5% 1/10W				
R1267	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W				
R1268	1-216-089-00	METAL GLAZE	47K 5% 1/10W				
R1269	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R1270	1-216-295-00	METAL GLAZE	0 5% 1/10W				
R1273	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R1274	1-216-295-00	METAL GLAZE	0 5% 1/10W				
R1276	1-216-295-00	METAL GLAZE	0 5% 1/10W				


The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié

KV-27XBR96S/32XBR96S  
RM-Y114A

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C2054	1-163-093-00	CERAMIC CHIP 10PF	5% 50V	L2009	1-410-663-31	INDUCTOR 10UH	
C2055	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	L2010	1-410-677-31	INDUCTOR 180UH	
C2056	1-136-161-00	FILM 0.047MF	5% 50V				
C2057	1-124-477-11	ELECT 47MF	20% 16V	L2011	1-410-677-31	INDUCTOR 180UH	
C2058	1-163-031-11	CERAMIC CHIP 0.01MF	50V				
C2059	1-136-177-00	FILM 1MF	5% 50V			<TRANSISTOR>	
C2060	1-136-153-00	FILM 0.01MF	5% 50V	Q2001	8-729-216-22	TRANSISTOR 2SA1162-G	
C2061	1-163-031-11	CERAMIC CHIP 0.01MF	50V	Q2002	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2062	1-163-095-00	CERAMIC CHIP 12PF	5% 50V	Q2003	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2063	1-163-101-00	CERAMIC CHIP 22PF	5% 50V	Q2004	8-729-216-22	TRANSISTOR 2SA1162-G	
C2064	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	Q2005	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2065	1-126-320-11	ELECT 10MF	20% 16V	Q2006	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2066	1-126-157-11	ELECT 10MF	20% 16V	Q2007	8-729-216-22	TRANSISTOR 2SA1162-G	
C2067	1-126-157-11	ELECT 10MF	20% 16V	Q2008	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
C2068	1-124-916-11	ELECT 22MF	20% 50V	Q2009	8-729-216-22	TRANSISTOR 2SA1162-G	
C2070	1-163-257-11	CERAMIC CHIP 180PF	5% 50V	Q2010	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2073	1-124-477-11	ELECT 47MF	20% 16V	Q2011	8-729-216-22	TRANSISTOR 2SA1162-G	
C2075	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	Q2012	8-729-216-22	TRANSISTOR 2SA1162-G	
		<CONNECTOR>		Q2015	8-729-216-22	TRANSISTOR 2SA1162-G	
P3-39	*1-564-521-11	PLUG, CONNECTOR 6P		Q2016	8-729-422-27	TRANSISTOR 2SD601A-Q	
P3-40	*1-564-519-11	PLUG, CONNECTOR 4P		Q2017	8-729-422-27	TRANSISTOR 2SD601A-Q	
P3-41	*1-564-519-11	PLUG, CONNECTOR 4P		Q2018	8-729-420-81	TRANSISTOR 2SD874A-R	
		<NETWORK>		Q2019	8-729-216-22	TRANSISTOR 2SA1162-G	
CP2001	1-236-472-11	NETWORK, RES, THICK FILM		Q2020	8-729-216-22	TRANSISTOR 2SA1162-G	
		<TRIMMER>		Q2021	8-729-422-27	TRANSISTOR 2SD601A-Q	
CV2001	1-141-245-00	CAP, TRIMMER		Q2022	8-729-422-27	TRANSISTOR 2SD601A-Q	
		<DIODE>		Q2023	8-729-422-27	TRANSISTOR 2SD601A-Q	
D2003	8-719-106-16	DIODE RD6.8MB1		Q2024	8-729-422-27	TRANSISTOR 2SD601A-Q	
D2004	8-719-404-46	DIODE MA110		Q2025	8-729-216-22	TRANSISTOR 2SA1162-G	
D2005	8-719-404-46	DIODE MA110		Q2026	8-729-216-22	TRANSISTOR 2SA1162-G	
D2006	8-719-105-45	DIODE RD3.3MB1		Q2027	8-729-216-22	TRANSISTOR 2SA1162-G	
D2007	8-719-911-19	DIODE 1SS119		Q2028	8-729-216-22	TRANSISTOR 2SA1162-G	
		<MODULE>		Q2029	8-729-216-22	TRANSISTOR 2SA1162-G	
FL2001	1-235-941-11	YC MODULE		Q2030	8-729-216-22	TRANSISTOR 2SA1162-G	
		<IC>		Q2031	8-729-216-22	TRANSISTOR 2SA1162-G	
IC2001	8-759-231-58	IC UPC7812H		Q2032	8-729-422-27	TRANSISTOR 2SD601A-Q	
IC2002	8-759-700-48	IC NJM2903S		Q2033	8-729-600-12	TRANSISTOR 2SK108-C	
IC2003	8-759-805-37	IC L78L05D-MA		Q2034	8-729-216-22	TRANSISTOR 2SA1162-G	
IC2004	8-759-066-51	IC MB88733-143		Q2035	8-729-422-27	TRANSISTOR 2SD601A-Q	
IC2005	8-759-803-25	IC CXK1006L		Q2036	8-729-422-27	TRANSISTOR 2SD601A-Q	
IC2006	8-752-006-12	IC CX20061				<RESISTOR>	
IC2007	8-752-033-32	IC CXA1228S		R2002A	1-216-357-91	METAL OXIDE 4.7K 5% 1W	
		<JACK>		R2003	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
J2001	*1-573-962-11	CONNECTOR (MALE) 50P		R2004	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
		<COIL>		R2006	1-216-689-11	METAL GLAZE 39K 5% 1/10W	
L2002	1-410-663-31	INDUCTOR 10UH		R2007	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W	
L2003	1-410-667-31	INDUCTOR 22UH		R2008	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
L2004	1-410-663-31	INDUCTOR 10UH		R2009	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
				R2010	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				R2011	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
				R2012	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
				R2013	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
				R2014	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
				R2015	1-216-033-00	METAL GLAZE 220 5% 1/10W	
				R2016	1-216-295-00	METAL GLAZE 0 5% 1/10W	
				R2017	1-216-047-00	METAL GLAZE 820 5% 1/10W	
				R2018	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
				R2019	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
				R2020	1-216-037-00	METAL GLAZE 330 5% 1/10W	
				R2021	1-216-095-00	METAL GLAZE 82K 5% 1/10W	
				R2022	1-216-109-00	METAL GLAZE 330K 5% 1/10W	

The components identified by shading and mark  are critical for safety.  
Replace only with part number specified.

REMARKREMARK

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The components identified by shading and mark **Δ** are critical for safety  
Replace only with part number specified

Les composants identifiés par une trame et une marque **Δ** sont critiques pour la sécurité  
Ne les remplacer que par une pièce portant le numéro spécifié.

**KV-27XBR96S/32XBR96S**  
RM-Y114A

**A**

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
*A-1297-164-A	A BOARD, COMPLETE (KV-32XBR96S(U/C))			C539	1-123-950-00	ELECT	47MF 20% 250V
	*****			C540	1-124-480-11	ELECT	470MF 20% 25V
*A-1297-165-A	A BOARD, COMPLETE (KV-27XBR96S(U/C))			C541	1-102-228-00	CERAMIC	470PF 10% 500V
	*****			C542	1-106-387-00	MYLAR	0.068MF 10% 200V
4-382-854-11	SCREW (M3X10), P, SW (+)			C543	1-129-898-00	FILM	0.0022MF 5% 630V
				C544	1-124-797-11	ELECT	0.47MF 20% 160V
				C545	1-102-244-00	CERAMIC	220PF 10% 500V
	<CAPACITOR>			C546	1-123-024-21	ELECT	33MF 10% 160V
C201	1-126-101-11	ELECT	100MF 20% 16V	C547	1-130-471-00	MYLAR	0.001MF 5% 50V
C210	1-102-121-00	CERAMIC	0.0022MF 10% 50V	C548	1-130-467-00	MYLAR	470PF 5% 50V
C211	1-101-006-00	CERAMIC	0.047MF 50V	C549	1-124-261-00	ELECT	10MF 20% 50V
C213	1-126-103-11	ELECT	470MF 20% 16V	C550	1-129-702-00	FILM	0.001MF 10% 630V
C214	1-126-101-11	ELECT	100MF 20% 16V	C551	1-130-471-00	MYLAR	0.001MF 5% 50V
C215	1-124-910-11	ELECT	47MF 20% 50V	C552	1-126-176-11	ELECT	220MF 20% 10V
C216	1-126-101-11	ELECT	100MF 20% 16V	C553	1-124-261-00	ELECT	10MF 20% 50V
C217	1-124-126-00	ELECT	47MF 20% 25V	C554 Δ	1-161-731-51	CERAMIC	0.001MF 10% 2KV
C218	1-126-103-11	ELECT	470MF 20% 16V	C555	1-123-947-00	ELECT	10MF 20% 250V
C219	1-136-169-00	FILM	0.22MF 5% 50V	C557	1-124-465-00	ELECT	0.47MF 20% 50V
C220	1-124-910-11	ELECT	47MF 20% 50V	C559	1-129-718-00	FILM	0.022MF 5% 630V
C223	1-123-875-11	ELECT	10MF 20% 50V	C560	1-136-169-00	FILM	0.22MF 5% 50V
C224	1-124-261-00	ELECT	10MF 20% 50V	C561	1-124-261-00	ELECT	10MF 20% 50V
C225	1-124-120-11	ELECT	220MF 20% 16V	C562	1-124-499-11	ELECT	1MF 20% 50V
C226	1-124-621-11	ELECT	3300MF 20% 6.3V	C563	1-130-491-00	MYLAR	0.047MF 5% 50V
C299	1-126-101-11	ELECT	100MF 20% 16V	C564	1-130-495-00	MYLAR	0.1MF 5% 50V
C501	1-137-114-11	FILM	0.68MF 5% 200V	C565	1-130-495-00	MYLAR	0.1MF 5% 50V
C502	1-130-471-00	FILM	0.001MF 5% 50V	C569	1-130-497-00	MYLAR	0.15MF 5% 50V
C503	1-124-261-00	ELECT	10MF 20% 50V	C570	1-130-471-00	MYLAR	0.001MF 5% 50V
C504	1-136-161-00	FILM	0.047MF 5% 50V	C571	1-130-471-00	FILM	0.001MF 2% 50V
C505	1-124-790-11	ELECT	0.47MF 20% 100V	C572	1-124-907-11	ELECT	10MF 20% 50V
C506	1-124-480-11	ELECT	470MF 20% 25V	C573	1-130-471-00	MYLAR	0.001MF 5% 50V
C507	1-130-473-00	MYLAR	0.0015MF 5% 50V	C575	1-102-038-00	CERAMIC	0.001MF 500V
C508	1-162-114-00	CERAMIC	0.0047MF 2KV	C576	1-106-355-12	MYLAR	0.0033MF 10% 200V
C509	1-124-808-51	ELECT	10MF 20% 200V	C1401	1-124-910-11	ELECT	47MF 20% 50V
C510	1-102-110-00	CERAMIC	220PF 10% 50V	C1402	1-126-157-11	ELECT	10MF 20% 16V
C511	1-124-477-11	ELECT	47MF 20% 25V	C1403	1-126-157-11	ELECT	10MF 20% 16V
C512	1-162-318-11	CERAMIC	0.001MF 10% 500V	C1404	1-126-157-11	ELECT	10MF 20% 16V
C513	1-106-391-12	MYLAR	0.1MF 10% 200V	C1405	1-124-910-11	ELECT	47MF 20% 50V
C514	1-124-477-11	ELECT	47MF 20% 25V	C1406	1-124-910-11	ELECT	47MF 20% 50V
C515	1-162-117-00	CERAMIC	100PF 10% 500V	C1407	1-124-607-11	ELECT	2200MF 20% 50V
C517	1-124-477-11	ELECT	47MF 20% 25V	C1408	1-136-165-00	FILM	0.1MF 5% 50V
C518	1-136-161-00	FILM	0.047MF 5% 50V	C1409	1-136-165-00	FILM	0.1MF 5% 50V
C519	1-124-472-11	ELECT	470MF 20% 10V	C1415	1-124-910-11	ELECT	47MF 20% 50V
C520 Δ	1-161-731-51	CERAMIC	0.001MF 10% 2KV	C1416	1-126-157-11	ELECT	10MF 20% 16V
C521 Δ	1-137-604-21	FILM	0.022MF 2% 2KV	C1417	1-126-157-11	ELECT	10MF 20% 16V
C522	1-162-116-00	CERAMIC	680PF 10% 2KV	C1418	1-124-910-11	ELECT	47MF 20% 50V
C523	1-124-465-00	ELECT	0.47MF 20% 50V	C1419	1-124-910-11	ELECT	47MF 20% 50V
C524	1-130-487-00	MYLAR	0.022MF 5% 50V	C1420	1-136-165-00	FILM	0.1MF 5% 50V
C525	1-162-116-00	CERAMIC	680PF 10% 2KV	C1421	1-124-607-11	ELECT	2200MF 20% 50V
C526 Δ	1-137-515-91	FILM	0.056MF 3% 400V	C1422	1-136-165-00	FILM	0.1MF 5% 50V
C527	1-136-167-00	FILM	0.15MF 5% 50V	C1423	1-124-922-11	ELECT	1000MF 20% 50V
C528	1-106-359-00	MYLAR	0.0047MF 10% 200V	C1424	1-124-607-11	ELECT	2200MF 20% 50V
C529	1-136-161-00	FILM	0.047MF 5% 50V	C1425	1-124-607-11	ELECT	2200MF 20% 50V
C530	1-136-105-00	FILM	0.33MF 5% 200V	C1426	1-126-157-11	ELECT	10MF 20% 16V
C531	1-124-634-11	ELECT	1MF 20% 250V	C1430	1-124-916-11	ELECT	22MF 20% 50V
C532	1-124-477-11	ELECT	47MF 20% 25V	C1435	1-124-916-11	ELECT	22MF 20% 50V
C533	1-137-516-11	FILM	1.2MF 5% 200V	C1437	1-130-499-00	MYLAR	0.22MF 5% 50V
C534	1-137-114-11	FILM	0.68MF 5% 200V	C1501	1-124-916-11	ELECT	22MF 20% 50V
C535	1-124-480-11	ELECT	470MF 20% 25V	C1502	1-126-301-11	ELECT	1MF 20% 50V
C536	1-102-228-00	CERAMIC	470PF 10% 500V	C1503	1-102-114-00	CERAMIC	470PF 10% 50V
C537	1-106-343-00	MYLAR	0.001MF 10% 100V	C1504	1-124-480-11	ELECT	470MF 20% 25V
C538	1-106-391-12	MYLAR	0.1MF 10% 200V	C1505	1-124-911-11	ELECT	220MF 20% 50V
				C1506	1-136-171-00	FILM	0.33MF 5% 50V
				C1507	1-106-222-00	MYLAR	0.12MF 10% 100V

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Les composants identifiés par  
une trame et une marque  $\Delta$   
sont critiques pour la sécurité.  
Ne les remplacer que par une  
pièce portant le numéro spécifié.

The components identified by  
shading and mark  $\Delta$  are criti-  
cal for safety.  
Replace only with part number  
specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C1508	1-124-480-11	ELECT 470MF	20% 25V	D525	8-719-911-19	DIODE 1SS119	
C1509	1-124-122-11	ELECT 100MF	20% 50V	D527	8-719-110-78	DIODE RD33ESB2	
C1511	1-164-014-11	CERAMIC 5PF	0.25PF 50V	D529	8-719-911-19	DIODE 1SS119	
C4001	1-124-922-11	ELECT 1000MF	20% 50V	D530	8-719-911-19	DIODE 1SS119	
C4007	1-124-916-11	ELECT 22MF	20% 50V	D1407	8-719-911-19	DIODE 1SS119	
C4008	1-130-499-00	MYLAR 0.22MF	5% 50V	D1408	8-719-911-19	DIODE 1SS119	
<CONNECTOR>				D1409	8-719-110-90	DIODE RD39ESB4	
A2	*1-573-964-11	PIN, CONNECTOR (PC BOARD) 6P		D1410	8-719-901-83	DIODE 1SS83	
A3	*1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P		D1411	8-719-901-83	DIODE 1SS83	
A4	*1-564-510-11	PLUG, CONNECTOR 7P		D1412	8-719-911-19	DIODE 1SS119	
A5	*1-564-507-11	PLUG, CONNECTOR 4P		D1413	8-719-911-19	DIODE 1SS119	
A9	*1-564-505-11	PLUG, CONNECTOR 2P		D1414	8-719-911-19	DIODE 1SS119	
A11	*1-564-507-11	PLUG, CONNECTOR 4P		D1503	8-719-908-03	DIODE GP08D	
A12	1-573-297-21	CONNECTOR, BOARD TO BOARD 18P		D4001	8-719-911-19	DIODE 1SS119	
A13	1-573-297-21	CONNECTOR, BOARD TO BOARD 18P		D4005	8-719-901-83	DIODE 1SS83	
A14	1-573-296-21	CONNECTOR, BOARD TO BOARD 10P		D4006	8-719-901-83	DIODE 1SS83	
A15	1-573-296-21	CONNECTOR, BOARD TO BOARD 10P		<IC>			
A18	1-573-296-21	CONNECTOR, BOARD TO BOARD 10P		IC201	8-749-920-58	IC SI-3090CA	
A21	*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P		IC204	8-759-701-75	IC NJM7805FA	
A37	*1-564-514-11	PLUG, CONNECTOR 11P		IC205	8-759-144-84	IC UPC24M05HF	
A38	*1-564-505-11	PLUG, CONNECTOR 2P		IC206	8-759-231-58	IC TA7812S	
A43	*1-564-508-11	PLUG, CONNECTOR 5P		IC501	8-759-103-93	IC UPC393C	
A49	*1-564-506-11	PLUG, CONNECTOR 3P		IC502	1-809-845-11	MODULE, PROTECTOR PM-30	
A100	1-573-979-21	CONNECTOR, BOARD TO BOARD 11P		IC503	8-759-103-93	IC UPC393C	
DY1	*1-580-798-11	CONNECTOR PIN (DY) 6P		IC504	8-759-231-58	IC TA7812S	
ES002	*1-573-960-11	CONNECTOR (FEMALE) 50P		IC1401	8-759-246-70	IC TA8216H	
<NETWORK>				IC1402	8-759-246-70	IC TA8216H	
CP3001	1-236-176-11	NETWORK, RES, THICK FILM		IC1501	8-759-506-46	IC TDA8179S	
CP3002	1-236-176-11	NETWORK, RES, THICK FILM		<JACK>			
CP3003	1-236-176-11	NETWORK, RES, THICK FILM		J201	1-507-562-00	JACK	
<DIODE>				J202	1-507-562-00	JACK	
D201	8-719-121-24	DIODE RD9.1ESL		<COIL>			
D202	8-719-121-24	DIODE RD9.1ESL		L001	1-408-409-00	INDUCTOR 10UH	
D205	8-719-911-19	DIODE 1SS119		L002	1-410-476-11	INDUCTOR 33UH	
D206	8-719-911-19	DIODE 1SS119		L201	1-408-408-00	INDUCTOR 8.2UH	
D207	8-719-911-19	DIODE 1SS119		L205	1-408-421-00	INDUCTOR 100UH	
D208	8-719-911-19	DIODE 1SS119		L208	1-410-785-31	INDUCTOR 0.22UH	
D209	8-719-510-48	DIODE DIN20R		L210	1-408-408-00	INDUCTOR 8.2UH	
D213	8-719-110-78	DIODE RD33ESB2		L501	1-459-104-00	COIL, WITH CORE	
D501	8-719-018-82	DIODE RGP02-20EL-6394		L502	1-412-552-31	INDUCTOR 2.2MMH	
D502	$\Delta$ 8-719-302-44	DIODE EL1Z-VI		L504	1-410-071-11	INDUCTOR 10MMH	
D503	8-719-970-87	DIODE ERA38-06		L507	1-459-483-00	COIL (WITH CORE)	
D504	8-719-911-19	DIODE 1SS119		L508	1-421-541-00	COIL, CHOKE 1000UH	
D506	8-719-109-90	DIODE RD5.6ESB3		L509	1-459-104-00	COIL, WITH CORE	
D508	8-719-109-88	DIODE RD5.6ESB1		L510	$\Delta$ 1-460-197-11	COIL, FERRITE (PMC)	
D509	8-719-110-03	DIODE RD7.5ESB2		L511	1-412-519-11	INDUCTOR 3.3UH	
D510	8-719-911-19	DIODE 1SS119		L512	1-412-531-31	INDUCTOR 33UH	
D511	8-719-300-33	DIODE RU-3AM		L513	1-412-519-11	INDUCTOR 3.3UH	
D512	8-719-908-03	DIODE GP08D		L514	1-459-123-00	COIL, DUST CORE (PAC)	
D513	8-719-908-03	DIODE GP08D		L515	1-410-645-31	INDUCTOR 100UH	
D514	8-719-312-72	DIODE RU30A		L520	1-412-531-31	INDUCTOR 33UH	
D515	8-719-302-43	DIODE EL1Z		L1501	1-412-531-31	INDUCTOR 33UH	
D516	8-719-979-85	DIODE EGP20G		<TRANSISTOR>			
D517	8-719-943-06	DIODE ERB24-06D		Q201	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D518	8-719-109-93	DIODE RD6.2ESB2					
D521	8-719-911-19	DIODE 1SS119					
D522	8-719-110-72	DIODE RD30ESB2					
D524	8-719-028-72	DIODE RGP02-17EL-6433					

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

KV-27XBR96S/32XBR96S  
RM-Y114A

- The components identified by  $\boxtimes$  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
Q202	8-729-119-78	TRANSISTOR 2SC2785-HFE		R517 $\Delta$	1-216-361-91	METAL OXIDE	0.22 5% 2W F
Q501	8-729-011-07	TRANSISTOR 2SC4763 (LBSONY)		R518	1-249-437-11	CARBON	47K 5% 1/4W
Q502	8-729-140-97	TRANSISTOR 2SB734-34		R519	1-247-755-11	CARBON	1.8K 5% 1/2W F
Q503	8-729-011-06	TRANSISTOR 2SC3840K		R520	1-249-441-11	CARBON	100K 5% 1/4W
Q504	8-729-119-76	TRANSISTOR 2SA1175-HFE		R521 $\Delta$	1-216-481-91	METAL OXIDE	1.2K 5% 3W F
Q505	8-729-119-76	TRANSISTOR 2SA1175-HFE		R522 $\Delta$	1-215-917-51	METAL OXIDE	1K 5% 3W F
Q506	8-729-011-00	TRANSISTOR 2SK1916-53-F87		R523	1-249-425-11	CARBON	4.7K 5% 1/4W
Q507	8-729-119-80	TRANSISTOR 2SC2688-LK		R524	1-215-445-00	METAL	10K 1% 1/4W
Q508	8-729-119-78	TRANSISTOR 2SC2785-HFE		R526	1-249-401-11	CARBON	47 5% 1/4W
Q509	8-729-119-76	TRANSISTOR 2SA1175-HFE		R527	1-249-417-11	CARBON	1K 5% 1/4W
Q510	8-729-119-78	TRANSISTOR 2SC2785-HFE		R528	1-247-903-00	CARBON	1M 5% 1/4W
Q511	8-729-119-76	TRANSISTOR 2SA1175-HFE		R529	1-249-429-11	CARBON	10K 5% 1/4W
Q512	8-729-119-78	TRANSISTOR 2SC2785-HFE		R530	1-215-457-00	METAL	33K 1% 1/4W
Q513	8-729-140-96	TRANSISTOR 2SD774-34		R531	1-249-432-11	CARBON	18K 5% 1/4W
Q515	8-729-119-76	TRANSISTOR 2SA1175-HFE		R532	1-249-437-11	CARBON	47K 5% 1/4W
Q516	8-729-119-76	TRANSISTOR 2SA1175-HFE		R533	1-247-887-00	CARBON	220K 5% 1/4W
Q1401	8-729-119-78	TRANSISTOR 2SC2785-HFE		R534	1-215-472-00	METAL	130K 1% 1/4W
Q1403	8-729-119-78	TRANSISTOR 2SC2785-HFE		R536	1-249-429-11	CARBON	10K 5% 1/4W
Q1404	8-729-119-78	TRANSISTOR 2SC2785-HFE		R537	1-215-465-00	METAL	68K 1% 1/4W
Q1405	8-729-119-78	TRANSISTOR 2SC2785-HFE		R538	1-247-883-00	CARBON	150K 5% 1/4W
Q1407	8-729-119-78	TRANSISTOR 2SC2785-HFE		R539	1-249-425-11	CARBON	4.7K 5% 1/4W
Q1408	8-729-119-78	TRANSISTOR 2SC2785-HFE		R540	1-249-437-11	CARBON	47K 5% 1/4W
Q1501	8-729-119-78	TRANSISTOR 2SC2785-HFE		R541	1-249-397-11	CARBON	22 5% 1/4W F
Q1502	8-729-119-78	TRANSISTOR 2SC2785-HFE		R542 $\Delta$	1-215-888-91	METAL OXIDE	220 5% 2W F
<RESISTOR>				R543	1-249-411-11	CARBON	330 5% 1/4W
R201	1-249-405-11	CARBON	100 5% 1/4W F	R544	1-249-441-11	CARBON	100K 5% 1/4W
R202	1-249-405-11	CARBON	100 5% 1/4W F	R546	1-215-441-00	METAL	6.8K 1% 1/4W
R210	1-249-441-11	CARBON	100K 5% 1/4W	R547	1-249-441-11	CARBON	100K 5% 1/4W
R211	1-249-425-11	CARBON	4.7K 5% 1/4W	R548 $\Delta$	1-215-889-91	METAL OXIDE	330 5% 2W F
R214	1-249-377-11	CARBON	0.47 5% 1/4W F	R549 $\Delta$	1-215-881-91	METAL OXIDE	15 5% 2W F
R219	1-249-426-11	CARBON	5.6K 5% 1/4W	R550 $\Delta$	1-215-909-51	METAL OXIDE	47 5% 3W F
R221	1-249-409-11	CARBON	220 5% 1/4W	R551	1-247-743-11	CARBON	220 5% 1/2W F
R222	1-249-434-11	CARBON	27K 5% 1/4W	R552	1-249-389-11	CARBON	4.7 5% 1/4W F
R223	1-249-433-11	CARBON	22K 5% 1/4W	R553	1-249-377-11	CARBON	0.47 5% 1/4W F
R224	1-249-409-11	CARBON	220 5% 1/4W	R554	1-249-377-11	CARBON	0.47 5% 1/4W F
R226	1-249-417-11	CARBON	1K 5% 1/4W	R555	1-202-826-00	SOLID	4.7K 20% 1/2W
R230 $\Delta$	1-215-923-51	METAL OXIDE	10K 5% 3W F	R556 $\Delta$	1-216-459-91	METAL OXIDE	2.7K 5% 2W F
R231	1-249-409-11	CARBON	220 5% 1/4W F	R558	1-259-882-11	CARBON	3.3M 5% 1/4W
R232 $\Delta$	1-216-380-91	METAL OXIDE	8.2 5% 2W F	R559 $\Delta$	1-216-439-91	METAL OXIDE	12K 5% 1W F
R233	1-249-409-11	CARBON	220 5% 1/4W	R560	1-247-901-11	CARBON	820K 5% 1/4W
R234	1-249-409-11	CARBON	220 5% 1/4W	R561	1-249-410-11	CARBON	270 5% 1/4W
R235	1-249-409-11	CARBON	220 5% 1/4W	R562	1-215-450-00	METAL	16K 1% 1/4W
R236	1-249-409-11	CARBON	220 5% 1/4W	R564	1-215-475-00	METAL	180K 1% 1/4W
R237	1-249-409-11	CARBON	220 5% 1/4W	R565 $\Delta$		CARBON	1/4W
R238	1-249-409-11	CARBON	220 5% 1/4W	R566 $\Delta$		CARBON	1/4W
R239	1-249-409-11	CARBON	220 5% 1/4W	R567	1-249-425-11	CARBON	4.7K 5% 1/4W
R240	1-249-482-11	CARBON	4.7 5% 1/2W F	R568	1-249-425-11	CARBON	4.7K 5% 1/4W
R501	1-249-431-11	CARBON	15K 5% 1/4W	R569	1-249-417-11	CARBON	1K 5% 1/4W
R502	1-249-431-11	CARBON	15K 5% 1/4W	R570	1-249-402-11	CARBON	56 5% 1/4W
R504 $\Delta$	1-215-869-91	METAL OXIDE	1K 5% 1W F	R572	1-249-393-11	CARBON	10 5% 1/4W F
R505	1-215-449-00	METAL	15K 1% 1/4W	R573	1-249-393-11	CARBON	10 5% 1/4W F
R506	1-249-423-11	CARBON	3.3K 5% 1/4W	R574 $\Delta$	1-215-882-91	METAL OXIDE	22 5% 2W F
R507	1-249-411-11	CARBON	330 5% 1/4W	R575 $\Delta$	1-216-459-91	METAL OXIDE	2.7K 5% 2W F
R508	1-249-435-11	CARBON	33K 5% 1/4W	R576	1-249-417-11	CARBON	1K 5% 1/4W F
R509	1-249-441-11	CARBON	100K 5% 1/4W	R577 $\Delta$	1-215-887-91	METAL OXIDE	150 5% 2W F
R510	1-249-409-11	CARBON	220 5% 1/4W F	R578 $\Delta$	1-216-449-91	METAL OXIDE	56 5% 2W F
R511	1-249-398-11	CARBON	27 5% 1/4W F	R579	1-249-441-11	CARBON	100K 5% 1/4W
R512	1-249-423-11	CARBON	3.3K 5% 1/4W	R580	1-249-441-11	CARBON	100K 5% 1/4W
R513	1-249-425-11	CARBON	4.7K 5% 1/4W	R583	1-249-441-11	CARBON	100K 5% 1/4W
R514	1-249-438-11	CARBON	56K 5% 1/4W	R584	1-215-463-00	METAL	56K 1% 1/4W
R515	1-249-433-11	CARBON	22K 5% 1/4W	R587	1-249-441-11	CARBON	100K 5% 1/4W
R516	1-249-419-11	CARBON	1.5K 5% 1/4W	R588	1-249-415-11	CARBON	680 5% 1/4W
				R589	1-249-437-11	CARBON	47K 5% 1/4W

A M

Les composants identifiés par  
une trame et une marque  $\Delta$   
sont critiques pour la sécurité  
Ne les remplacer que par une  
pièce portant le numéro spécifié.

The components identified by  
shading and mark  $\Delta$  are critical  
for safety  
Replace only with part number  
specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R590	1-249-431-11	CARBON	15K 5% 1/4W				
R591	1-247-887-00	CARBON	220K 5% 1/4W			<THERMISTOR>	
R592	1-249-429-11	CARBON	10K 5% 1/4W				
R593 Δ	1-215-878-91	METAL OXIDE	33K 5% 1W F	THP150	1-807-925-11	THERMISTOR	
R594	1-247-903-00	CARBON	1M 5% 1/4W				
R595	1-249-440-11	CARBON	82K 5% 1/4W			<TUNER>	
R596	1-249-432-11	CARBON	18K 5% 1/4W				
R597	1-249-437-11	CARBON	47K 5% 1/4W	TU101Δ	1-693-102-22	TUNER (BTR-XA401)	
R599	1-249-425-11	CARBON	4.7K 5% 1/4W			*****	
R1401	1-215-445-00	METAL	10K 1% 1/4W				
R1402	1-215-445-00	METAL	10K 1% 1/4W			*A-1306-435-A	M BOARD, COMPLETE
R1403	1-215-430-00	METAL	2.4K 1% 1/4W			*****	
R1404	1-215-430-00	METAL	2.4K 1% 1/4W				
R1405	1-249-385-11	CARBON	2.2 5% 1/4W F			<CAPACITOR>	
R1406	1-249-385-11	CARBON	2.2 5% 1/4W F				
R1407	1-215-447-00	METAL	12K 1% 1/4W	C001	1-124-261-00	ELECT	10MF 20% 50V
R1408	1-215-447-00	METAL	12K 1% 1/4W	C002	1-163-125-00	CERAMIC CHIP	220PF 5% 50V
R1409	1-249-433-11	CARBON	22K 5% 1/4W	C003	1-136-161-00	FILM	0.047MF 5% 50V
R1410	1-249-433-11	CARBON	22K 5% 1/4W	C004	1-126-301-11	ELECT	1MF 20% 50V
R1418	1-249-427-11	CARBON	6.8K 5% 1/4W	C005	1-163-125-00	CERAMIC CHIP	220PF 5% 50V
R1419	1-249-427-11	CARBON	6.8K 5% 1/4W	C014	1-124-910-11	ELECT	47MF 20% 50V
R1420	1-249-385-11	CARBON	2.2 5% 1/4W F	C015	1-124-464-11	ELECT	0.22MF 20% 50V
R1421	1-249-385-11	CARBON	2.2 5% 1/4W F	C017	1-124-589-11	ELECT	47MF 20% 16V
R1423	1-247-883-00	CARBON	150K 5% 1/4W	C018	1-163-141-00	CERAMIC CHIP	0.001MF 5% 50V
R1424	1-249-433-11	CARBON	22K 5% 1/4W	C019	1-164-695-11	CERAMIC CHIP	0.0022MF 5% 50V
R1426	1-249-433-11	CARBON	22K 5% 1/4W	C020	1-163-241-11	CERAMIC CHIP	39PF 5% 50V
R1427	1-249-421-11	CARBON	2.2K 5% 1/4W	C021	1-163-239-11	CERAMIC CHIP	33PF 5% 50V
R1428	1-249-421-11	CARBON	2.2K 5% 1/4W	C029	1-163-115-00	CERAMIC CHIP	82PF 5% 50V
R1429	1-249-421-11	CARBON	2.2K 5% 1/4W	C030	1-163-115-00	CERAMIC CHIP	82PF 5% 50V
R1431	1-249-405-11	CARBON	100 5% 1/4W	C034	1-163-125-00	CERAMIC CHIP	220PF 5% 50V
R1433	1-249-425-11	CARBON	4.7K 5% 1/4W	C035	1-163-125-00	CERAMIC CHIP	220PF 5% 50V
R1434	1-249-423-11	CARBON	3.3K 5% 1/4W	C036	1-163-125-00	CERAMIC CHIP	220PF 5% 50V
R1439	1-247-883-00	CARBON	150K 5% 1/4W	C041	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
R1501	1-215-449-00	METAL	15K 1% 1/4W	C042	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
R1502	1-215-433-00	METAL	3.3K 1% 1/4W	C045	1-163-125-00	CERAMIC CHIP	220PF 5% 50V
R1503	1-249-425-11	CARBON	4.7K 5% 1/4W	C047	1-124-261-00	ELECT	10MF 20% 50V
R1505	1-249-433-11	CARBON	22K 5% 1/4W	C048	1-124-261-00	ELECT	10MF 20% 50V
R1506Δ	1-218-642-91	METAL OXIDE	100K 5% 1W F	C049	1-124-261-00	ELECT	10MF 20% 50V
R1507	1-249-436-11	CARBON	39K 5% 1/4W	C055	1-163-809-11	CERAMIC CHIP	0.047MF 10% 25V
R1508	1-215-453-00	METAL	22K 1% 1/4W	C064	1-163-121-00	CERAMIC CHIP	150PF 5% 50V
R1509	1-215-455-00	METAL	27K 1% 1/4W	C065	1-124-257-00	ELECT	2.2MF 20% 50V
R1510	1-249-383-11	CARBON	1.5 5% 1/4W F			<CONNECTOR>	
R1511Δ	1-215-888-91	METAL OXIDE	220 5% 2W F	M39	*1-564-521-11	PLUG, CONNECTOR 6P	
R1512Δ	1-216-369-91	METAL OXIDE	1 5% 2W F	M45	*1-564-523-11	PLUG, CONNECTOR 8P	
R1513	1-249-436-11	CARBON	39K 5% 1/4W	M001	1-573-965-21	PIN, CONNECTOR (PC BOARD) 50P	
R4001	1-249-421-11	CARBON	2.2K 5% 1/4W			<DIODE>	
R4002	1-249-385-11	CARBON	2.2 5% 1/4W F				
R4003Δ	1-216-361-91	METAL OXIDE	0.22 5% 2W F	D001	8-719-404-46	DIODE MA110	
R4004Δ	1-216-374-91	METAL OXIDE	2.7 5% 2W F	D002	8-719-404-46	DIODE MA110	
R4006Δ	1-216-396-91	METAL OXIDE	3.9 5% 3W F	D003	8-719-404-46	DIODE MA110	
				D004	8-719-404-46	DIODE MA110	
				D005	8-719-404-46	DIODE MA110	
				D006	8-719-404-46	DIODE MA110	
				D007	8-719-404-46	DIODE MA110	
				D008	8-719-404-46	DIODE MA110	
				D009	8-719-404-46	DIODE MA110	
				D010	8-719-300-57	DIODE 1T33	
				D011	8-719-404-46	DIODE MA110	
				D012	8-719-404-46	DIODE MA110	
				D014	8-719-404-46	DIODE MA110	
				D015	8-719-404-46	DIODE MA110	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		<IC>					
IC001	8-759-169-06	IC TMC73C247-10		R036	1-216-033-00	METAL GLAZE 220 5% 1/10W	
IC002	8-759-403-44	IC MN1280-S		R037	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				R038	1-216-033-00	METAL GLAZE 220 5% 1/10W	
				R039	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				R040	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
				R041	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
		<COIL>		R042	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
L001	1-408-409-00	INDUCTOR 10UH		R043	1-216-033-00	METAL GLAZE 220 5% 1/10W	
L002	1-410-476-11	INDUCTOR 33UH		R044	1-216-033-00	METAL GLAZE 220 5% 1/10W	
				R045	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				R046	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
		<TRANSISTOR>		R047	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q001	8-729-216-22	TRANSISTOR 2SA1162-G		R048	1-216-033-00	METAL GLAZE 220 5% 1/10W	
Q002	8-729-216-22	TRANSISTOR 2SA1162-G		R049	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q003	8-729-216-22	TRANSISTOR 2SA1162-G		R050	1-216-295-00	METAL GLAZE 0 5% 1/10W	
Q004	8-729-422-27	TRANSISTOR 2SD601A-Q		R051	1-216-033-00	METAL GLAZE 220 5% 1/10W	
Q005	8-729-422-27	TRANSISTOR 2SD601A-Q		R052	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q006	8-729-216-22	TRANSISTOR 2SA1162-G		R053	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q007	8-729-216-22	TRANSISTOR 2SA1162-G		R054	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
Q008	8-729-422-27	TRANSISTOR 2SD601A-Q		R055	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
Q009	8-729-422-27	TRANSISTOR 2SD601A-Q		R056	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q010	8-729-422-27	TRANSISTOR 2SD601A-Q		R057	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q011	8-729-422-27	TRANSISTOR 2SD601A-Q		R058	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q012	8-729-422-27	TRANSISTOR 2SD601A-Q		R059	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
Q013	8-729-216-22	TRANSISTOR 2SA1162-G		R060	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
Q014	8-729-422-27	TRANSISTOR 2SD601A-Q		R063	1-216-033-00	METAL GLAZE 220 5% 1/10W	
		<RESISTOR>		R064	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R001	1-216-045-00	METAL GLAZE 680 5% 1/10W		R065	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R002	1-216-097-00	METAL GLAZE 100K 5% 1/10W		R066	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R003	1-216-121-00	METAL GLAZE 1M 5% 1/10W		R067	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R004	1-216-073-00	METAL GLAZE 10K 5% 1/10W		R068	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R005	1-216-073-00	METAL GLAZE 10K 5% 1/10W		R069	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R006	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W		R070	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R007	1-216-027-00	METAL GLAZE 120 5% 1/10W		R071	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R008	1-216-041-00	METAL GLAZE 470 5% 1/10W		R072	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R009	1-216-027-00	METAL GLAZE 120 5% 1/10W		R073	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R011	1-216-033-00	METAL GLAZE 220 5% 1/10W		R074	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R012	1-216-033-00	METAL GLAZE 220 5% 1/10W		R075	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R013	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W		R076	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R014	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W		R077	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R015	1-216-089-00	METAL GLAZE 47K 5% 1/10W		R078	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R016	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W		R079	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R017	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W		R080	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R018	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W		R081	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R019	1-216-073-00	METAL GLAZE 10K 5% 1/10W		R082	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R020	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W		R083	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R021	1-216-097-00	METAL GLAZE 100K 5% 1/10W		R084	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R022	1-216-089-00	METAL GLAZE 47K 5% 1/10W		R085	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R023	1-216-093-00	METAL GLAZE 68K 5% 1/10W		R086	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R024	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W		R087	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R025	1-216-073-00	METAL GLAZE 10K 5% 1/10W		R088	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R026	1-216-081-00	METAL GLAZE 22K 5% 1/10W		R089	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R027	1-216-041-00	METAL GLAZE 470 5% 1/10W		R090	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R028	1-216-023-00	METAL GLAZE 82 5% 1/10W		R091	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R029	1-216-097-00	METAL GLAZE 100K 5% 1/10W		R092	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
R030	1-216-097-00	METAL GLAZE 100K 5% 1/10W		R093	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R031	1-216-089-00	METAL GLAZE 47K 5% 1/10W		R094	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R032	1-216-089-00	METAL GLAZE 47K 5% 1/10W		R095	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R033	1-216-073-00	METAL GLAZE 10K 5% 1/10W		R096	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R034	1-216-033-00	METAL GLAZE 220 5% 1/10W		R097	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R035	1-216-033-00	METAL GLAZE 220 5% 1/10W		R098	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				R099	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
				R100	1-216-025-00	METAL GLAZE 100 5% 1/10W	

M E1

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R101	1-216-025-00	METAL GLAZE 100 5%	1/10W	C360	1-137-491-11	FILM CHIP 0.1MF 5%	25V
R102	1-216-089-00	METAL GLAZE 47K 5%	1/10W	C361	1-126-301-11	ELECT 1MF 20%	50V
R103	1-216-033-00	METAL GLAZE 220 5%	1/10W	C362	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
R104	1-216-033-00	METAL GLAZE 220 5%	1/10W	C363	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
<CRYSTAL>				C364	1-126-301-11	ELECT 1MF 20%	50V
X001	1-579-743-11	VIBRATOR, CRYSTAL		C365	1-164-343-11	CERAMIC CHIP 0.056MF 10%	25V
*****				C366	1-124-257-00	ELECT 2.2MF 20%	50V
*A-1346-133-A	E1 BOARD, COMPLETE	*****		C367	1-126-157-11	ELECT 10MF 20%	16V
<CAPACITOR>				C368	1-124-234-00	ELECT 22MF 20%	16V
C301	1-163-010-11	CERAMIC CHIP 0.0012MF 10%	50V	C369	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
C303	1-126-157-11	ELECT 10MF 20%	16V	C370	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C304	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	C371	1-124-126-00	ELECT 47MF 20%	16V
C305	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	C372	1-124-589-11	ELECT 47MF 20%	16V
C306	1-163-115-00	CERAMIC CHIP 82PF 5%	50V	C373	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C309	1-164-505-11	CERAMIC CHIP 2.2MF 16V		C378	1-163-117-00	CERAMIC CHIP 100PF 5%	50V
C310	1-163-109-00	CERAMIC CHIP 47PF 5%	50V	C379	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C314	1-124-915-11	ELECT 10MF 20%	16V	C380	1-163-137-00	CERAMIC CHIP 680PF 5%	50V
C315	1-164-505-11	CERAMIC CHIP 2.2MF 16V		C381	1-163-101-00	CERAMIC CHIP 22PF 5%	50V
C319	1-126-157-11	ELECT 10MF 20%	16V	C382	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C320	1-124-465-00	ELECT 0.47MF 20%	50V	C383	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
C321	1-163-125-00	CERAMIC CHIP 220PF 5%	50V	C384	1-163-095-00	CERAMIC CHIP 12PF 5%	50V
C322	1-163-003-11	CERAMIC CHIP 330PF 10%	50V	<CONNECTOR>			
C323	1-163-099-00	CERAMIC CHIP 18PF 5%	50V	E1-24	1-564-523-11	PLUG, CONNECTOR 8P	
C324	1-124-234-00	ELECT 22MF 20%	16V	E1-25	*1-564-521-11	PLUG, CONNECTOR 6P	
C325	1-104-563-11	FILM CHIP 0.1MF 5%	16V	E1-26	*1-564-522-11	PLUG, CONNECTOR 7P	
C326	1-104-563-11	FILM CHIP 0.1MF 5%	16V	E1-001	1-573-965-21	PIN, CONNECTOR (PC BOARD) 50P	
C327	1-104-563-11	FILM CHIP 0.1MF 5%	16V	<DIODE>			
C328	1-126-157-11	ELECT 10MF 20%	16V	D301	8-719-404-46	DIODE MA110	
C329	1-126-157-11	ELECT 10MF 20%	16V	D302	8-719-404-46	DIODE MA110	
C330	1-126-157-11	ELECT 10MF 20%	16V	D303	8-719-404-46	DIODE MA110	
C331	1-126-301-11	ELECT 1MF 20%	50V	D304	8-719-404-46	DIODE MA110	
C332	1-124-584-00	ELECT 100MF 20%	10V	D305	8-719-404-46	DIODE MA110	
C333	1-163-037-11	CERAMIC CHIP 0.022MF 10%	25V	D306	8-719-158-15	DIODE RD5.6SB	
C334	1-137-491-11	FILM CHIP 0.1MF 5%	25V	D307	8-719-404-46	DIODE MA110	
C335	1-136-169-00	FILM 0.22MF 5%	50V	D310	8-719-158-15	DIODE RD5.6SB	
C336	1-126-301-11	ELECT 1MF 20%	50V	D312	8-719-404-46	DIODE MA110	
C337	1-126-301-11	ELECT 1MF 20%	50V	D313	8-719-404-46	DIODE MA110	
C338	1-124-584-00	ELECT 100MF 20%	10V	D314	8-719-404-46	DIODE MA110	
C339	1-124-791-11	ELECT 1MF 20%	50V	D315	8-719-404-46	DIODE MA110	
C340	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V	D316	8-719-404-46	DIODE MA110	
C341	1-126-157-11	ELECT 10MF 20%	16V	D317	8-719-404-46	DIODE MA110	
C342	1-124-465-00	ELECT 0.47MF 20%	50V	D318	8-719-404-46	DIODE MA110	
C343	1-124-589-11	ELECT 47MF 20%	16V	D319	8-719-404-46	DIODE MA110	
C344	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	D320	8-719-404-46	DIODE MA110	
C345	1-124-767-00	ELECT 2.2MF 20%	50V	D321	8-719-400-94	DIODE MA3130	
C346	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	<DELAY LINE>			
C347	1-136-169-00	FILM 0.22MF 5%	50V	DL302	1-415-817-11	DELAY LINE	
C348	1-163-117-00	CERAMIC CHIP 100PF 5%	50V	<IC>			
C349	1-126-301-11	ELECT 1MF 20%	50V	IC301	8-752-058-68	IC CXA1315M	
C350	1-126-301-11	ELECT 1MF 20%	50V	IC302	8-752-059-67	IC CXA1465AS	
C351	1-163-002-11	CERAMIC CHIP 270PF 10%	50V	IC303	8-759-106-02	IC UPC4570G2	
C352	1-164-489-11	CERAMIC CHIP 0.22MF 10%	16V	<COIL>			
C353	1-126-163-11	ELECT 4.7MF 20%	50V	L301	1-410 064-11	INDUCTOR 2.7MMH	
C354	1-136-169-00	FILM 0.22MF 5%	50V	L307	1-410-944-31	INDUCTOR CHIP 15UH	
C355	1-124-465-00	ELECT 0.47MF 20%	50V				
C356	1-163-017-00	CERAMIC CHIP 0.0047MF 10%	50V				
C357	1-163-117-00	CERAMIC CHIP 100PF 5%	50V				
C358	1-124-767-00	ELECT 2.2MF 20%	50V				

E1

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
L308	1-410-946-31	INDUCTOR CHIP 22UH		R341	1-216-043-00	METAL GLAZE 560 5% 1/10W	
		<TRANSISTOR>		R343	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
Q301	8-729-925-79	TRANSISTOR 1MX3		R344	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
Q302	8-729-925-79	TRANSISTOR 1MX3		R345	1-216-292-11	METAL GLAZE 8.2M 5% 1/8W	
Q303	8-729-422-27	TRANSISTOR 2SD601A-Q		R346	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
Q304	8-729-907-46	TRANSISTOR 1M21		R347	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
Q305	8-729-925-79	TRANSISTOR 1MX3		R348	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q306	8-729-422-27	TRANSISTOR 2SD601A-Q		R349	1-216-295-00	METAL GLAZE 0 5% 1/10W	
Q307	8-729-903-10	TRANSISTOR FMW1		R350	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
Q309	8-729-422-27	TRANSISTOR 2SD601A-Q		R351	1-216-674-11	METAL CHIP 9.1K 0.50% 1/10W	
Q310	8-729-422-27	TRANSISTOR 2SD601A-Q		R352	1-216-011-00	METAL GLAZE 27 5% 1/10W	
Q311	8-729-403-27	TRANSISTOR XN4401		R353	1-216-001-00	METAL GLAZE 10 5% 1/10W	
Q312	8-729-422-27	TRANSISTOR 2SD601A-Q		R354	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q314	8-729-403-27	TRANSISTOR XN4401		R355	1-216-001-00	METAL GLAZE 10 5% 1/10W	
Q315	8-729-422-27	TRANSISTOR 2SD601A-Q		R356	1-216-001-00	METAL GLAZE 10 5% 1/10W	
Q316	8-729-422-27	TRANSISTOR 2SD601A-Q		R357	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q317	8-729-216-22	TRANSISTOR 2SA1162-G		R358	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q321	8-729-925-79	TRANSISTOR 1MX3		R359	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q322	8-729-216-22	TRANSISTOR 2SA1162-G		R360	1-216-119-00	METAL GLAZE 820K 5% 1/10W	
Q323	8-729-422-27	TRANSISTOR 2SD601A-Q		R361	1-216-025-00	METAL GLAZE 100 5% 1/10W	
Q324	8-729-216-22	TRANSISTOR 2SA1162-G		R362	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
Q325	8-729-216-22	TRANSISTOR 2SA1162-G		R363	1-216-295-00	METAL GLAZE 0 5% 1/10W	
Q326	8-729-422-27	TRANSISTOR 2SD601A-Q		R364	1-216-045-00	METAL GLAZE 680 5% 1/10W	
Q327	8-729-422-27	TRANSISTOR 2SD601A-Q		R365	1-216-017-00	METAL GLAZE 47 5% 1/10W	
Q328	8-729-422-27	TRANSISTOR 2SD601A-Q		R366	1-216-001-00	METAL GLAZE 10 5% 1/10W	
Q329	8-729-925-79	TRANSISTOR 1MX3		R367	1-216-045-00	METAL GLAZE 680 5% 1/10W	
Q330	8-729-925-79	TRANSISTOR 1MX3		R368	1-216-001-00	METAL GLAZE 10 5% 1/10W	
Q333	8-729-925-79	TRANSISTOR 1MX3		R369	1-216-033-00	METAL GLAZE 220 5% 1/10W	
Q334	8-729-422-27	TRANSISTOR 2SD601A-Q		R370	1-216-033-00	METAL GLAZE 220 5% 1/10W	
Q335	8-729-907-46	TRANSISTOR 1M21		R371	1-216-033-00	METAL GLAZE 220 5% 1/10W	
Q340	8-729-422-27	TRANSISTOR 2SD601A-Q		R372	1-216-031-00	METAL GLAZE 180 5% 1/10W	
Q342	8-729-925-79	TRANSISTOR 1MX3		R373	1-216-671-11	METAL CHIP 6.8K 0.50% 1/10W	
Q344	8-729-216-22	TRANSISTOR 2SA1162-G		R374	1-216-037-00	METAL GLAZE 330 5% 1/10W	
		<RESISTOR>		R375	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R301	1-216-025-00	METAL GLAZE 100 5% 1/10W		R376	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R302	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W		R377	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R303	1-216-079-00	METAL GLAZE 18K 5% 1/10W		R378	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R304	1-216-081-00	METAL GLAZE 22K 5% 1/10W		R379	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R305	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W		R380	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R306	1-216-081-00	METAL GLAZE 22K 5% 1/10W		R381	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R307	1-216-089-00	METAL GLAZE 47K 5% 1/10W		R382	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R308	1-216-037-00	METAL GLAZE 330 5% 1/10W		R383	1-216-653-11	METAL CHIP 1.2K 0.50% 1/10W	
R309	1-216-073-00	METAL GLAZE 10K 5% 1/10W		R384	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R310	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W		R385	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R312	1-216-043-00	METAL GLAZE 560 5% 1/10W		R386	1-216-687-11	METAL CHIP 33K 0.50% 1/10W	
R313	1-216-035-00	METAL GLAZE 270 5% 1/10W		R387	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R314	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W		R388	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R316	1-216-035-00	METAL GLAZE 270 5% 1/10W		R389	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R317	1-216-121-00	METAL GLAZE 1M 5% 1/10W		R390	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R320	1-216-039-00	METAL GLAZE 390 5% 1/10W		R391	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R325	1-216-033-00	METAL GLAZE 220 5% 1/10W		R393	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R326	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W		R394	1-216-109-00	METAL GLAZE 330K 5% 1/10W	
R331	1-216-017-00	METAL GLAZE 47 5% 1/10W		R395	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R332	1-216-657-11	METAL CHIP 1.8K 0.50% 1/10W		R396	1-216-105-00	METAL GLAZE 220K 5% 1/10W	
R333	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W		R397	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R336	1-216-047-00	METAL GLAZE 820 5% 1/10W		R398	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R338	1-216-043-00	METAL GLAZE 560 5% 1/10W		R399	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
R339	1-216-047-00	METAL GLAZE 820 5% 1/10W		R1301	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R340	1-216-651-11	METAL CHIP 1K 0.50% 1/10W		R1302	1-216-045-00	METAL GLAZE 680 5% 1/10W	
				R1303	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
				R1304	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
				R1305	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				R1306	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
				R1307	1-216-073-00	METAL GLAZE 10K 5% 1/10W	

REMARK	REF.NO.	PART NO.	DESCRIPTION				REMARK
	R1388	1-216-001-00	METAL GLAZE	10	5%	1/10W	
	R1389	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
	R1390	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
	R1391	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
	R1392	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
	R1394	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
	R1395	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
	R1396	1-216-125-00	METAL GLAZE	1.5M	5%	1/10W	
	R1399	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
	R5301	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
	R5302	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
	R5303	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
	R5304	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
	R5305	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
	<CRYSTAL>						
	X301	1-567-505-11	OSCILLATOR, CRYSTAL				
	*****						
	*A-1346-136-A		E2 BOARD, COMPLETE				
	*****						
	<CAPACITOR>						
	C2302	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
	C2303	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
	C2310	1-163-105-00	CERAMIC CHIP	33PF	5%	50V	
	C2313	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
	C2314	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
	C2315	1-126-157-11	ELECT	10MF	20%	16V	
	C2316	1-126-157-11	ELECT	10MF	20%	16V	
	C2317	1-126-157-11	ELECT	10MF	20%	16V	
	C2318	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
	C2320	1-124-589-11	ELECT	47MF	20%	16V	
	C2321	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
	C2322	1-124-234-00	ELECT	22MF	20%	16V	
	C2323	1-124-234-00	ELECT	22MF	20%	16V	
	C2324	1-124-234-00	ELECT	22MF	20%	16V	
	C2325	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
	C2326	1-124-589-11	ELECT	47MF	20%	16V	
	C2327	1-164-505-11	CERAMIC CHIP	2.2MF		16V	
	C2328	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
	C2329	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
	C2331	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
	C2332	1-124-234-00	ELECT	22MF	20%	16V	
	C2333	1-124-234-00	ELECT	22MF	20%	16V	
	C2334	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
	C2335	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
	C2336	1-126-163-11	ELECT	4.7MF	20%	16V	
	C2337	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
	C2338	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
	C2340	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
	C2345	1-164-505-11	CERAMIC CHIP	2.2MF		16V	
	C2346	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
	C2347	1-163-367-11	CERAMIC CHIP	39PF	5%	50V	
	C2349	1-164-505-11	CERAMIC CHIP	2.2MF		16V	
	C2350	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
	C2351	1-164-505-11	CERAMIC CHIP	2.2MF		16V	
	C2352	1-164-505-11	CERAMIC CHIP	2.2MF		16V	
	C2353	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
	C2354	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
	C2357	1-126-301-11	ELECT	1MF	20%	50V	

E2

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C2360	1-163-109-00	CERAMIC CHIP 47PF	5% 50V	Q2345	8-729-422-27	TRANSISTOR 2SD601A-Q	
<CONNECTOR>				<RESISTOR>			
E2-25	*1-564-521-11	PLUG, CONNECTOR 6P		R2302	1-216-049-00	METAL GLAZE 1K 5%	1/10W
E2-26	*1-564-522-11	PLUG, CONNECTOR 7P		R2303	1-216-049-00	METAL GLAZE 1K 5%	1/10W
E2-46	*1-564-518-11	PLUG, CONNECTOR 3P		R2304	1-216-049-00	METAL GLAZE 1K 5%	1/10W
E2-002	1-573-965-21	PIN, CONNECTOR (PC BOARD) 50P		R2305	1-216-033-00	METAL GLAZE 220 5%	1/10W
<DIODE>				R2306	1-216-045-00	METAL GLAZE 680 5%	1/10W
D2306	8-719-404-46	DIODE MA110		R2307	1-216-045-00	METAL GLAZE 680 5%	1/10W
D2307	8-719-946-98	DIODE FMN1		R2308	1-216-045-00	METAL GLAZE 680 5%	1/10W
D2308	8-719-946-98	DIODE FMN1		R2309	1-216-041-00	METAL GLAZE 470 5%	1/10W
D2309	8-719-404-46	DIODE MA110		R2310	1-216-055-00	METAL GLAZE 1.8K 5%	1/10W
D2312	8-719-404-46	DIODE MA110		R2311	1-216-025-00	METAL GLAZE 100 5%	1/10W
D2313	8-719-404-46	DIODE MA110		R2312	1-216-043-00	METAL GLAZE 560 5%	1/10W
D2314	8-713-300-57	DIODE 1T33		R2313	1-216-055-00	METAL GLAZE 1.8K 5%	1/10W
D2317	8-719-404-46	DIODE MA110		R2314	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
<IC>				R2315	1-216-081-00	METAL GLAZE 22K 5%	1/10W
IC2301	8-759-066-52	IC PCA8510T/012-T		R2317	1-216-041-00	METAL GLAZE 470 5%	1/10W
IC2303	8-759-925-75	IC SN74HC05ANS		R2318	1-216-055-00	METAL GLAZE 1.8K 5%	1/10W
IC2304	8-752-037-15	IC CXA1387S		R2319	1-216-079-00	METAL GLAZE 18K 5%	1/10W
IC2306	8-759-011-65	IC MC74HC4053F		R2320	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
IC2307	8-752-058-68	IC CXA1315M		R2321	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
<COIL>				R2322	1-216-049-00	METAL GLAZE 1K 5%	1/10W
L2304	1-408-414-00	INDUCTOR 27UH		R2323	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
<TRANSISTOR>				R2324	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q2301	8-729-903-10	TRANSISTOR FMW1		R2325	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q2303	8-729-403-27	TRANSISTOR XN4401		R2326	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
Q2304	8-729-925-79	TRANSISTOR IMX3		R2327	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
Q2305	8-729-903-10	TRANSISTOR FMW1		R2328	1-216-025-00	METAL GLAZE 100 5%	1/10W
Q2306	8-729-403-27	TRANSISTOR XN4401		R2329	1-216-025-00	METAL GLAZE 100 5%	1/10W
Q2307	8-729-403-27	TRANSISTOR XN4401		R2330	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
Q2308	8-729-403-27	TRANSISTOR XN4401		R2331	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
Q2309	8-729-903-10	TRANSISTOR FMW1		R2332	1-216-025-00	METAL GLAZE 100 5%	1/10W
Q2310	8-729-403-27	TRANSISTOR XN4401		R2333	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
Q2311	8-729-903-10	TRANSISTOR FMW1		R2334	1-216-295-00	METAL GLAZE 0 5%	1/10W
Q2312	8-729-403-27	TRANSISTOR XN4401		R2335	1-216-295-00	METAL GLAZE 0 5%	1/10W
Q2313	8-729-903-10	TRANSISTOR FMW1		R2336	1-216-295-00	METAL GLAZE 0 5%	1/10W
Q2314	8-729-403-27	TRANSISTOR XN4401		R2337	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q2315	8-729-903-10	TRANSISTOR FMW1		R2338	1-216-081-00	METAL GLAZE 22K 5%	1/10W
Q2317	8-729-216-22	TRANSISTOR 2SA1162-G		R2340	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q2318	8-729-216-22	TRANSISTOR 2SA1162-G		R2341	1-216-041-00	METAL GLAZE 470 5%	1/10W
Q2319	8-729-216-22	TRANSISTOR 2SA1162-G		R2342	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q2320	8-729-422-27	TRANSISTOR 2SD601A-Q		R2343	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q2321	8-729-422-27	TRANSISTOR 2SD601A-Q		R2344	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q2322	8-729-422-27	TRANSISTOR 2SD601A-Q		R2345	1-216-077-00	METAL GLAZE 15K 5%	1/10W
Q2324	8-729-216-22	TRANSISTOR 2SA1162-G		R2346	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q2326	8-729-422-27	TRANSISTOR 2SD601A-Q		R2347	1-216-083-00	METAL GLAZE 27K 5%	1/10W
Q2327	8-729-422-27	TRANSISTOR 2SD601A-Q		R2350	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q2330	8-729-903-10	TRANSISTOR FMW1		R2351	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q2337	8-729-925-79	TRANSISTOR IMX3		R2352	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q2338	8-729-422-27	TRANSISTOR 2SD601A-Q		R2353	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q2339	8-729-422-27	TRANSISTOR 2SD601A-Q		R2354	1-216-210-00	METAL GLAZE 3.3K 5%	1/8W
Q2340	8-729-422-27	TRANSISTOR 2SD601A-Q		R2355	1-216-178-00	METAL GLAZE 150 5%	1/8W
Q2341	8-729-422-27	TRANSISTOR 2SD601A-Q		R2356	1-216-677-11	METAL CHIP 12K 0.50%	1/10W
Q2342	8-729-422-27	TRANSISTOR 2SD601A-Q		R2357	1-216-670-11	METAL CHIP 6.2K 0.50%	1/10W
				R2359	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
				R2360	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
				R2361	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
				R2362	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
				R2363	1-216-041-00	METAL GLAZE 470 5%	1/10W
				R2364	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
				R2365	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
				R2366	1-216-081-00	METAL GLAZE 22K 5%	1/10W

E2 Y2

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R2367	1-216-043-00	METAL GLAZE	560 5% 1/10W	R3367	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R2368	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R3368	1-216-083-00	METAL GLAZE	27K 5% 1/10W
R2371	1-216-033-00	METAL GLAZE	220 5% 1/10W	R3369	1-216-001-00	METAL GLAZE	10 5% 1/10W
R2374	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R3370	1-216-001-00	METAL GLAZE	10 5% 1/10W
R2375	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R3371	1-216-001-00	METAL GLAZE	10 5% 1/10W
R2376	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R3374	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W
R2377	1-216-025-00	METAL GLAZE	100 5% 1/10W	R3392	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R2378	1-216-025-00	METAL GLAZE	100 5% 1/10W	R3401	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R2379	1-216-043-00	METAL GLAZE	560 5% 1/10W	R7312	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R2380	1-216-043-00	METAL GLAZE	560 5% 1/10W	R7313	1-216-047-00	METAL GLAZE	820 5% 1/10W
R2381	1-216-043-00	METAL GLAZE	560 5% 1/10W	R7314	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R2382	1-216-073-00	METAL GLAZE	10K 5% 1/10W	<CRYSTAL>			
R2384	1-216-081-00	METAL GLAZE	22K 5% 1/10W	X2301	1-577-071-11	VIBRATOR, CERAMIC	
R2385	1-216-075-00	METAL GLAZE	12K 5% 1/10W	*****			
R2386	1-216-049-00	METAL GLAZE	1K 5% 1/10W	*A-1394-442-A Y2 BOARD, COMPLETE			
R2387	1-216-025-00	METAL GLAZE	100 5% 1/10W	*****			
R2388	1-216-017-00	METAL GLAZE	47 5% 1/10W	<CAPACITOR>			
R2390	1-216-043-00	METAL GLAZE	560 5% 1/10W	C401	1-124-234-00	ELECT	22MF 20% 16V
R2393	1-216-017-00	METAL GLAZE	47 5% 1/10W	C424	1-126-301-11	ELECT	1MF 20% 50V
R2394	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C425	1-126-301-11	ELECT	1MF 20% 50V
R2395	1-216-001-00	METAL GLAZE	10 5% 1/10W	C426	1-126-301-11	ELECT	1MF 20% 50V
R2397	1-216-043-00	METAL GLAZE	560 5% 1/10W	C427	1-124-465-00	ELECT	0.47MF 20% 50V
R2399	1-216-001-00	METAL GLAZE	10 5% 1/10W	C428	1-126-163-11	ELECT	4.7MF 20% 50V
R3301	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C429	1-124-478-11	ELECT	100MF 20% 25V
R3302	1-216-001-00	METAL GLAZE	10 5% 1/10W	C430	1-124-261-00	ELECT	10MF 20% 50V
R3303	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W	C431	1-126-301-11	ELECT	1MF 20% 50V
R3304	1-216-091-00	METAL GLAZE	56K 5% 1/10W	C432	1-126-301-11	ELECT	1MF 20% 50V
R3306	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C433	1-131-347-00	TANTALUM	1MF 20% 16V
R3307	1-216-085-00	METAL GLAZE	33K 5% 1/10W	C434	1-126-301-11	ELECT	1MF 20% 50V
R3308	1-216-043-00	METAL GLAZE	560 5% 1/10W	C435	1-130-309-00	FILM	0.033MF 5% 100V
R3309	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C436	1-126-301-11	ELECT	1MF 20% 50V
R3310	1-216-001-00	METAL GLAZE	10 5% 1/10W	C437	1-130-487-00	MYLAR	0.022MF 5% 50V
R3311	1-216-081-00	METAL GLAZE	22K 5% 1/10W	C438	1-126-301-11	ELECT	1MF 20% 50V
R3312	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C439	1-124-034-51	ELECT	33MF 20% 16V
R3313	1-216-083-00	METAL GLAZE	27K 5% 1/10W	C440	1-126-301-11	ELECT	1MF 20% 50V
R3314	1-216-689-11	METAL GLAZE	39K 5% 1/10W	C441	1-126-301-11	ELECT	1MF 20% 50V
R3315	1-216-077-00	METAL GLAZE	15K 5% 1/10W	C442	1-124-261-00	ELECT	10MF 20% 50V
R3316	1-216-077-00	METAL GLAZE	15K 5% 1/10W	C443	1-124-589-11	ELECT	47MF 20% 16V
R3318	1-216-091-00	METAL GLAZE	56K 5% 1/10W	C444	1-126-163-11	ELECT	4.7MF 20% 50V
R3319	1-216-081-00	METAL GLAZE	22K 5% 1/10W	C445	1-126-163-11	ELECT	4.7MF 20% 50V
R3320	1-216-017-00	METAL GLAZE	47 5% 1/10W	C446	1-124-234-00	ELECT	22MF 20% 16V
R3321	1-216-079-00	METAL GLAZE	18K 5% 1/10W	C447	1-126-301-11	ELECT	1MF 20% 50V
R3323	1-216-091-00	METAL GLAZE	56K 5% 1/10W	C448	1-136-170-00	FILM	0.27MF 5% 50V
R3324	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C449	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V
R3325	1-216-025-00	METAL GLAZE	100 5% 1/10W	C450	1-130-475-00	MYLAR	0.0022MF 5% 50V
R3328	1-216-001-00	METAL GLAZE	10 5% 1/10W	C451	1-124-261-00	ELECT	10MF 20% 50V
R3330	1-216-033-00	METAL GLAZE	220 5% 1/10W	C452	1-124-261-00	ELECT	10MF 20% 50V
R3331	1-216-033-00	METAL GLAZE	220 5% 1/10W	C453	1-130-475-00	MYLAR	0.0022MF 5% 50V
R3332	1-216-081-00	METAL GLAZE	22K 5% 1/10W	C454	1-131-368-00	TANTALUM	3.3MF 10% 16V
R3339	1-216-081-00	METAL GLAZE	22K 5% 1/10W	C455	1-131-347-00	TANTALUM	1MF 20% 16V
R3340	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C456	1-136-171-00	FILM	0.33MF 5% 50V
R3341	1-216-677-11	METAL CHIP	12K 0.50% 1/10W	C457	1-136-175-00	FILM	0.68MF 5% 50V
R3342	1-216-670-11	METAL CHIP	6.2K 0.50% 1/10W	C458	1-126-101-11	ELECT	100MF 20% 16V
R3343	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C459	1-126-101-11	ELECT	100MF 20% 16V
R3344	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C460	1-126-101-11	ELECT	100MF 20% 16V
R3349	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C461	1-124-499-11	ELECT	1MF 20% 50V
R3350	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C462	1-124-499-11	ELECT	1MF 20% 50V
R3351	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C465	1-130-485-00	MYLAR	0.015MF 5% 50V
R3353	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W				
R3354	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W				
R3361	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R3362	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R3364	1-216-295-00	METAL GLAZE	0 5% 1/10W				
R3365	1-216-097-00	METAL GLAZE	100K 5% 1/10W				

Y2

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C466	1-130-485-00	MYLAR 0.015MF	5% 50V	R471	1-216-033-00	METAL GLAZE 220 5% 1/10W	
C467	1-136-169-00	FILM 0.22MF	5% 50V	R472	1-216-686-11	METAL CHIP 30K 0.50% 1/10W	
C468	1-136-169-00	FILM 0.22MF	5% 50V	R473	1-216-295-00	METAL GLAZE 0 5% 1/10W	
C469	1-126-157-11	ELECT 10MF	20% 16V	R474	1-216-295-00	METAL GLAZE 0 5% 1/10W	
C470	1-126-157-11	ELECT 10MF	20% 16V	R475	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
C471	1-124-589-11	ELECT 47MF	20% 16V	R476	1-216-673-11	METAL CHIP 8.2K 0.50% 1/10W	
C472	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	R477	1-216-676-11	METAL CHIP 11K 0.50% 1/10W	
C473	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	R478	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
C474	1-124-234-00	ELECT 22MF	20% 16V	R479	1-216-673-11	METAL CHIP 8.2K 0.50% 1/10W	
C475	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	R480	1-216-676-11	METAL CHIP 11K 0.50% 1/10W	
C476	1-124-234-00	ELECT 22MF	20% 16V	R481	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
C477	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	R482	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
C478	1-124-478-11	ELECT 100MF	20% 25V	R483	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
C479	1-126-163-11	ELECT 4.7MF	20% 50V	R485	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
C480	1-124-768-11	ELECT 4.7MF	20% 50V	R486	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
C481	1-124-768-11	ELECT 4.7MF	20% 50V	R488	1-216-295-00	METAL GLAZE 0 5% 1/10W	
C482	1-126-163-11	ELECT 4.7MF	20% 50V	R494	1-216-025-00	METAL GLAZE 100 5% 1/10W	
C483	1-163-113-00	CERAMIC CHIP 68PF	5% 50V	R495	1-216-025-00	METAL GLAZE 100 5% 1/10W	
C484	1-163-113-00	CERAMIC CHIP 68PF	5% 50V	R496	1-216-025-00	METAL GLAZE 100 5% 1/10W	
C485	1-163-038-00	CERAMIC CHIP 0.1MF	25V	R497	1-216-033-00	METAL GLAZE 220 5% 1/10W	
C487	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	R498	1-216-025-00	METAL GLAZE 100 5% 1/10W	
C488	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	R499	1-216-025-00	METAL GLAZE 100 5% 1/10W	
<CONNECTOR>				R500	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
Y2-401	1-573-966-11	PIN, CONNECTOR (PC BOARD) 36P		R501	1-216-669-11	METAL CHIP 5.6K 0.50% 1/10W	
<DIODE>				R502	1-216-033-00	METAL GLAZE 220 5% 1/10W	
D405	8-719-107-13	DIODE RD18MB1		R503	1-216-663-11	METAL CHIP 3.3K 0.50% 1/10W	
D406	8-719-107-13	DIODE RD18MB1		R504	1-216-669-11	METAL CHIP 5.6K 0.50% 1/10W	
D407	8-719-107-13	DIODE RD18MB1		R507	1-216-295-00	METAL GLAZE 0 5% 1/10W	
D408	8-719-105-83	DIODE RD5.1MB3		R509	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
D409	8-719-981-50	DIODE RB-100A		R510	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
D410	8-719-981-50	DIODE RB-100A		R512	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
D413	8-719-158-19	DIODE RD6.2SB		R513	1-216-663-11	METAL CHIP 3.3K 0.50% 1/10W	
D414	8-719-158-55	DIODE RD15SB		R515	1-216-295-00	METAL GLAZE 0 5% 1/10W	
D415	8-719-158-55	DIODE RD15SB		R517	1-216-025-00	METAL GLAZE 100 5% 1/10W	
<IC>				R518	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
IC403	8-759-996-43	IC RC4558PS		R519	1-216-295-00	METAL GLAZE 0 5% 1/10W	
IC404	8-759-067-24	IC 24C04A1/P		R521	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
IC406	8-752-037-24	IC CXA1264AS		R522	1-216-033-00	METAL GLAZE 220 5% 1/10W	
IC407	8-759-245-75	IC TA8184P		R523	1-216-033-00	METAL GLAZE 220 5% 1/10W	
IC408	8-752-057-18	IC CXA1315P		R524	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
<TRANSISTOR>				R525	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q404	8-729-216-22	TRANSISTOR 2SA1162-G		R526	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
Q405	8-729-216-22	TRANSISTOR 2SA1162-G		R527	1-218-753-11	METAL CHIP 110K 0.50% 1/10W	
Q409	8-729-422-27	TRANSISTOR 2SD601A-Q		R528	1-216-689-11	METAL CHIP 39K 0.50% 1/10W	
Q410	8-729-422-27	TRANSISTOR 2SD601A-Q		R529	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
<RESISTOR>				R531	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R447	1-216-033-00	METAL GLAZE 220 5% 1/10W		R532	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R453	1-216-033-00	METAL GLAZE 220 5% 1/10W		R533	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R464	1-216-081-00	METAL GLAZE 22K 5% 1/10W		R535	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R465	1-216-081-00	METAL GLAZE 22K 5% 1/10W		R536	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R466	1-216-025-00	METAL GLAZE 100 5% 1/10W		R537	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R467	1-216-033-00	METAL GLAZE 220 5% 1/10W		R538	1-218-753-11	METAL CHIP 110K 0.50% 1/10W	
R468	1-216-033-00	METAL GLAZE 220 5% 1/10W		R539	1-216-689-11	METAL CHIP 39K 0.50% 1/10W	
R469	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W		R540	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R470	1-216-033-00	METAL GLAZE 220 5% 1/10W		R541	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				R542	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				R543	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				R546	1-216-682-11	METAL CHIP 20K 0.50% 1/10W	
				R547	1-216-682-11	METAL CHIP 20K 0.50% 1/10W	
				*****			

X3


REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
*A-1394-446-A X3 BOARD, COMPLETE *****				C2590	1-135-179-21	TANTAL. CHIP 2.2MF	20% 16V
<CAPACITOR>				C2591	1-135-179-21	TANTAL. CHIP 2.2MF	20% 16V
C2501	1-124-477-11	ELECT 47MF	20% 16V	C2592	1-135-179-21	TANTAL. CHIP 2.2MF	20% 16V
C2502	1-124-477-11	ELECT 47MF	20% 16V	C2593	1-135-179-21	TANTAL. CHIP 2.2MF	20% 16V
C2505	1-124-638-11	ELECT 22MF	20% 6.3V	<DIODE>			
C2506	1-126-177-11	ELECT 100MF	20% 10V	D2501	8-719-404-46	DIODE MA110	
C2507	1-126-163-11	ELECT 4.7MF	20% 16V	<FERRITE BEAD>			
C2508	1-163-109-00	CERAMIC CHIP 47PF	5% 50V	FB2502	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
C2509	1-126-163-11	ELECT 4.7MF	20% 50V	FB2504	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
C2512	1-163-031-11	CERAMIC CHIP 0.01MF	50V	<FILTER>			
C2513	1-163-109-00	CERAMIC CHIP 47PF	5% 50V	FL2501	1-236-164-11	ENCAPSULATED COMPONENT	
C2514	1-126-163-11	ELECT 4.7MF	20% 16V	FL2503	1-236-164-11	ENCAPSULATED COMPONENT	
C2516	1-126-163-11	ELECT 4.7MF	20% 50V	FL2505	1-236-164-11	ENCAPSULATED COMPONENT	
C2517	1-163-031-11	CERAMIC CHIP 0.01MF	50V	FL2506	1-236-129-11	ENCAPSULATED COMPONENT	
C2518	1-163-031-11	CERAMIC CHIP 0.01MF	50V	FL2507	1-236-129-11	ENCAPSULATED COMPONENT	
C2519	1-163-031-11	CERAMIC CHIP 0.01MF	50V	FL2508	1-236-129-11	ENCAPSULATED COMPONENT	
C2520	1-163-031-11	CERAMIC CHIP 0.01MF	50V	FL2509	1-236-129-11	ENCAPSULATED COMPONENT	
C2521	1-163-088-00	CERAMIC CHIP 5PF	0.25PF 50V	<IC>			
C2522	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	IC2501	8-759-052-52	IC L78M05T-FA	
C2523	1-163-100-00	CERAMIC CHIP 20PF	5% 50V	IC2502	8-759-031-31	IC MC33174M	
C2524	1-163-031-11	CERAMIC CHIP 0.01MF	50V	IC2503	8-752-344-45	IC CXD2555Q	
C2525	1-163-031-11	CERAMIC CHIP 0.01MF	50V	IC2504	8-752-343-18	IC CXD2704Q	
C2526	1-163-031-11	CERAMIC CHIP 0.01MF	50V	IC2506	8-759-031-31	IC MC33174M	
C2527	1-163-031-11	CERAMIC CHIP 0.01MF	50V	IC2507	8-752-344-45	IC CXD2555Q	
C2528	1-163-031-11	CERAMIC CHIP 0.01MF	50V	IC2508	8-752-844-48	IC CXP5068H-205Q	
C2529	1-163-031-11	CERAMIC CHIP 0.01MF	50V	IC2509	8-759-042-02	IC S-80743AL-A7-S	
C2532	1-126-163-11	ELECT 4.7MF	20% 16V	IC2510	8-752-332-80	IC CXD1160AQ	
C2536	1-124-589-11	ELECT 47MF	20% 16V	IC2511	8-759-932-21	IC MB81256-12PSZ	
C2537	1-163-031-11	CERAMIC CHIP 0.01MF	50V	IC2512	8-759-069-14	IC M51132L	
C2540	1-126-163-11	ELECT 4.7MF	20% 16V	IC2513	8-759-100-96	IC UPC4558G2	
C2544	1-163-031-11	CERAMIC CHIP 0.01MF	50V	<JACK>			
C2545	1-163-031-11	CERAMIC CHIP 0.01MF	50V	J2501	1-573-966-11	PIN, CONNECTOR (PC BOARD) 36P	
C2546	1-163-031-11	CERAMIC CHIP 0.01MF	50V	<COIL>			
C2547	1-163-031-11	CERAMIC CHIP 0.01MF	50V	L2501	1-410-204-31	INDUCTOR CHIP 10UH	
C2548	1-163-031-11	CERAMIC CHIP 0.01MF	50V	L2504	1-410-204-31	INDUCTOR CHIP 10UH	
C2549	1-163-031-11	CERAMIC CHIP 0.01MF	50V	L2505	1-410-196-11	INDUCTOR CHIP 2.2UH	
C2550	1-163-031-11	CERAMIC CHIP 0.01MF	50V	L2510	1-410-204-31	INDUCTOR CHIP 10UH	
C2551	1-163-031-11	CERAMIC CHIP 0.01MF	50V	L2511	1-410-204-31	INDUCTOR CHIP 10UH	
C2552	1-163-031-11	CERAMIC CHIP 0.01MF	50V	L2512	1-410-204-31	INDUCTOR CHIP 10UH	
C2553	1-126-177-11	ELECT 100MF	20% 10V	L2513	1-410-204-31	INDUCTOR CHIP 10UH	
C2554	1-163-033-00	CERAMIC CHIP 0.022MF	50V	L2514	1-410-204-31	INDUCTOR CHIP 10UH	
C2557	1-163-031-11	CERAMIC CHIP 0.01MF	50V	L2515	1-410-204-31	INDUCTOR CHIP 10UH	
C2558	1-163-031-11	CERAMIC CHIP 0.01MF	50V	L2516	1-410-204-31	INDUCTOR CHIP 10UH	
C2560	1-126-163-11	ELECT 4.7MF	20% 16V	L2517	1-410-204-31	INDUCTOR CHIP 10UH	
C2561	1-163-263-11	CERAMIC CHIP 330PF	5% 50V	<TRANSISTOR>			
C2562	1-163-018-00	CERAMIC CHIP 0.0056MF	10% 50V	Q2501	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2563	1-164-695-11	CERAMIC CHIP 0.0022MF	5% 50V				
C2566	1-126-163-11	ELECT 4.7MF	20% 16V				
C2569	1-164-695-11	CERAMIC CHIP 0.0022MF	5% 50V				
C2570	1-163-018-00	CERAMIC CHIP 0.0056MF	10% 50V				
C2571	1-163-263-11	CERAMIC CHIP 330PF	5% 50V				
C2572	1-164-695-11	CERAMIC CHIP 0.0022MF	5% 50V				
C2573	1-163-263-11	CERAMIC CHIP 330PF	5% 50V				
C2574	1-163-018-00	CERAMIC CHIP 0.0056MF	10% 50V				
C2575	1-163-031-11	CERAMIC CHIP 0.01MF	50V				
C2577	1-124-465-00	ELECT 0.47MF	20% 50V				
C2578	1-124-465-00	ELECT 0.47MF	20% 50V				
C2579	1-163-018-00	CERAMIC CHIP 0.0056MF	10% 50V				
C2580	1-163-263-11	CERAMIC CHIP 330PF	5% 50V				
C2581	1-164-695-11	CERAMIC CHIP 0.0022MF	5% 50V				
C2582	1-124-234-00	ELECT 22MF	20% 16V				
C2583	1-124-589-11	ELECT 47MF	20% 16V				


X3 P2

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
<RESISTOR>				R2591	1-216-631-11	METAL CHIP 150 0.50% 1/10W	
R2501	1-216-097-00	METAL GLAZE 100K 5% 1/10W		R2592	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R2502	1-216-699-11	METAL CHIP 100K 0.50% 1/10W		R2593	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R2505	1-216-667-11	METAL CHIP 4.7K 0.50% 1/10W		R2594	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R2506	1-216-667-11	METAL CHIP 4.7K 0.50% 1/10W		R2595	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R2507	1-216-097-00	METAL GLAZE 100K 5% 1/10W		R2596	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R2508	1-216-699-11	METAL CHIP 100K 0.50% 1/10W		R2597	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R2509	1-216-097-00	METAL GLAZE 100K 5% 1/10W		R2598	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R2510	1-216-097-00	METAL GLAZE 100K 5% 1/10W		R2599	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R2511	1-216-667-11	METAL CHIP 4.7K 0.50% 1/10W		R2600	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R2512	1-216 667-11	METAL CHIP 4.7K 0.50% 1/10W		R2601	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R2513	1-216-025-00	METAL GLAZE 100 5% 1/10W		R2602	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R2518	1-216-025-00	METAL GLAZE 100 5% 1/10W		R2603	1-216-665-11	METAL CHIP 3.9K 0.50% 1/10W	
R2519	1-216-025-00	METAL GLAZE 100 5% 1/10W		R2605	1-216-679-11	METAL CHIP 15K 0.50% 1/10W	
R2520	1-216-025-00	METAL GLAZE 100 5% 1/10W		R2606	1-216-679-11	METAL CHIP 15K 0.50% 1/10W	
R2521	1-216-025-00	METAL GLAZE 100 5% 1/10W		R2607	1-216-679-11	METAL CHIP 15K 0.50% 1/10W	
R2522	1-216-025-00	METAL GLAZE 100 5% 1/10W		R2608	1-216-679-11	METAL CHIP 15K 0.50% 1/10W	
R2531	1-216-049-00	METAL GLAZE 1K 5% 1/10W		R2609	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R2532	1-216-049-00	METAL GLAZE 1K 5% 1/10W		R2610	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R2533	1-216-681-11	METAL CHIP 18K 0.50% 1/10W		R2611	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R2534	1-216-675-11	METAL CHIP 10K 0.50% 1/10W		R2612	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R2535	1-216 677-11	METAL CHIP 12K 0.50% 1/10W		<CRYSTAL>			
R2536	1-216-687-11	METAL CHIP 33K 0.50% 1/10W		X2501	1-579-692-31	VIBRATOR, CRYSTAL	
R2537	1-216-685-11	METAL CHIP 27K 0.50% 1/10W		*****			
R2538	1-216-681-11	METAL CHIP 18K 0.50% 1/10W		*A-1195-067-A	P2 BOARD, COMPLETE		
R2539	1-216 049-00	METAL GLAZE 1K 5% 1/10W		*****			
R2540	1-216-049-00	METAL GLAZE 1K 5% 1/10W		<CAPACITOR>			
R2541	1-216-049-00	METAL GLAZE 1K 5% 1/10W		C3001	1-163-111-00	CERAMIC CHIP 56PF 5% 50V	
R2542	1-216-049-00	METAL GLAZE 1K 5% 1/10W		C3002	1-163-127-00	CERAMIC CHIP 270PF 5% 50V	
R2543	1-216-681-11	METAL CHIP 18K 0.50% 1/10W		C3003	1-163-127-00	CERAMIC CHIP 270PF 5% 50V	
R2544	1-216-675-11	METAL CHIP 10K 0.50% 1/10W		C3004	1-124-034-51	ELECT 33MF 20% 16V	
R2545	1-216-687-11	METAL CHIP 33K 0.50% 1/10W		C3005	1-124-034-51	ELECT 33MF 20% 16V	
R2546	1-216-677-11	METAL CHIP 12K 0.50% 1/10W		C3006	1-126-177-11	ELECT 100MF 20% 6.3V	
R2547	1-216-685-11	METAL CHIP 27K 0.50% 1/10W		C3007	1-126-177-11	ELECT 100MF 20% 6.3V	
R2548	1-216-681-11	METAL CHIP 18K 0.50% 1/10W		C3008	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
R2549	1-216-049-00	METAL GLAZE 1K 5% 1/10W		C3009	1-163-119-00	CERAMIC CHIP 120PF 5% 50V	
R2550	1-216-049-00	METAL GLAZE 1K 5% 1/10W		C3010	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
R2551	1-216-049-00	METAL GLAZE 1K 5% 1/10W		C3011	1-163-119-00	CERAMIC CHIP 120PF 5% 50V	
R2552	1-216-025-00	METAL GLAZE 100 5% 1/10W		C3012	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
R2557	1-216-025-00	METAL GLAZE 100 5% 1/10W		C3013	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
R2559	1-216-025-00	METAL GLAZE 100 5% 1/10W		C3014	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
R2560	1-216-025-00	METAL GLAZE 100 5% 1/10W		C3015	1-130-483-00	MYLAR 0.01MF 5% 50V	
R2561	1 216-073-00	METAL GLAZE 10K 5% 1/10W		C3016	1-126-177-11	ELECT 100MF 20% 6.3V	
R2562	1-216-073-00	METAL GLAZE 10K 5% 1/10W		C3017	1-126-301-11	ELECT 1MF 20% 50V	
R2563	1-216-025-00	METAL GLAZE 100 5% 1/10W		C3018	1-130-477-00	MYLAR 0.0033MF 5% 50V	
R2564	1 216-025-00	METAL GLAZE 100 5% 1/10W		C3019	1-163-127-00	CERAMIC CHIP 270PF 5% 50V	
R2565	1-216 089-00	METAL GLAZE 47K 5% 1/10W		C3020	1-163-121-00	CERAMIC CHIP 150PF 5% 50V	
R2566	1-216-073-00	METAL GLAZE 10K 5% 1/10W		C3021	1-163-101-00	CERAMIC CHIP 22PF 5% 50V	
R2567	1-216-073-00	METAL GLAZE 10K 5% 1/10W		C3022	1-163-115-00	CERAMIC CHIP 82PF 5% 50V	
R2568	1-216-073-00	METAL GLAZE 10K 5% 1/10W		C3023	1-126-301-11	ELECT 1MF 20% 50V	
R2569	1-216-073-00	METAL GLAZE 10K 5% 1/10W		C3024	1-126-177-11	ELECT 100MF 20% 6.3V	
R2570	1-216-049-00	METAL GLAZE 1K 5% 1/10W		C3025	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
R2571	1-216-025-00	METAL GLAZE 100 5% 1/10W		C3026	1-163-101-00	CERAMIC CHIP 22PF 5% 50V	
R2572	1-216-025-00	METAL GLAZE 100 5% 1/10W		C3027	1-124-034-51	ELECT 33MF 20% 16V	
R2573	1-216-025-00	METAL GLAZE 100 5% 1/10W		C3028	1-163-085-00	CERAMIC CHIP 2PF 0.25PF 50V	
R2574	1-216-025-00	METAL GLAZE 100 5% 1/10W		C3029	1-163-097-00	CERAMIC CHIP 15PF 5% 50V	
R2575	1-216-025-00	METAL GLAZE 100 5% 1/10W		C3030	1-124-034-51	ELECT 33MF 20% 16V	
R2576	1-216-025-00	METAL GLAZE 100 5% 1/10W		C3031	1-126-096-11	ELECT 10KF 20% 25V	
R2577	1-216-025-00	METAL GLAZE 100 5% 1/10W					
R2578	1-216-025-00	METAL GLAZE 100 5% 1/10W					
R2579	1-216-025-00	METAL GLAZE 100 5% 1/10W					
R2583	1-216-025-00	METAL GLAZE 100 5% 1/10W					
R2584	1-216-025-00	METAL GLAZE 100 5% 1/10W					
R2585	1-216-025-00	METAL GLAZE 100 5% 1/10W					
R2590	1-216-631-11	METAL CHIP 150 0.50% 1/10W					

P2

REF.NO.	PART NO.	DESCRIPTION			REMARK	REF.NO.	PART NO.	DESCRIPTION			REMARK
C3032	1-130-479-00	MYLAR	0.0047MF	5%	50V	IC3006	8-759-630-63	IC	M5M4C500L-10K		
C3033	1-124-465-00	ELECT	0.47MF	20%	50V	IC3007	8-759-011-65	IC	MC74HC4053F		
C3034	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	IC3008	8-759-630-63	IC	M5M4C500L-10K		
C3035	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	IC3009	8-759-605-14	IC	M52678P		
C3036	1-124-034-51	ELECT	33MF	20%	16V	IC3010	8-759-112-06	IC	UPC78N05H		
C3037	1-126-163-11	ELECT	4.7MF	20%	50V	IC3011	8-759-049-49	IC	UPC7893AHF		
C3038	1-124-034-51	ELECT	33MF	20%	16V						
C3039	1-126-163-11	ELECT	4.7MF	20%	50V						
C3040	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V						
C3041	1-124-034-51	ELECT	33MF	20%	16V						
C3042	1-130-491-00	MYLAR	0.047MF	5%	50V	J3001	1-573-965-21	PIN, CONNECTOR (PC BOARD)	50P		
C3043	1-124-465-00	ELECT	0.47MF	20%	50V						
C3044	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V						
C3045	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V						
C3046	1-126-177-11	ELECT	100MF	20%	6.3V	L3001	1-410-470-11	INDUCTOR	10UH		
C3047	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	L3002	1-410-470-11	INDUCTOR	10UH		
C3049	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	L3003	1-410-470-11	INDUCTOR	10UH		
C3050	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	L3004	1-410-470-11	INDUCTOR	10UH		
C3051	1-124-034-51	ELECT	33MF	20%	16V	L3005	1-408-420-00	INDUCTOR	82UH		
C3052	1-126-101-11	ELECT	100MF	20%	16V	L3005	1-408-420-00	INDUCTOR	82UH		
C3054	1-124-261-00	ELECT	10MF	20%	50V	L3006	1-408-421-00	INDUCTOR	100UH		
C3057	1-124-478-11	ELECT	100MF	20%	25V	L3007	1-410-434-21	INDUCTOR	180UH		
C3058	1-124-478-11	ELECT	100MF	20%	25V	L3008	1-408-427-00	INDUCTOR	330UH		
<CONNECTOR>						<TRANSISTOR>					
P2-40	*1-564-519-11	PLUG, CONNECTOR 4P				Q3001	8-729-422-27	TRANSISTOR	2SD601A-Q		
<NETWORK>						Q3002	8-729-422-27	TRANSISTOR	2SD601A-Q		
CP3001	1-236-176-11	NETWORK, RES, THICK FILM				Q3003	8-729-216-22	TRANSISTOR	2AS1162-G		
CP3002	1-236-176-11	NETWORK, RES, THICK FILM				Q3004	8-729-422-27	TRANSISTOR	2SD601A-Q		
CP3003	1-236-176-11	NETWORK, RES, THICK FILM				Q3005	8-729-216-22	TRANSISTOR	2AS1162-G		
<DIODE>						Q3006	8-729-216-22	TRANSISTOR	2AS1162-G		
D3002	8-713-300-57	DIODE 1T33				Q3007	8-729-216-22	TRANSISTOR	2AS1162-G		
D3003	8-713-300-57	DIODE 1T33				Q3008	8-729-216-22	TRANSISTOR	2AS1162-G		
D3004	8-719-404-46	DIODE MA110				Q3009	8-729-422-27	TRANSISTOR	2SD601A-Q		
<FILER>						Q3010	8-729-422-27	TRANSISTOR	2SD601A-Q		
FL3001	1-236-129-11	ENCAPSULATED COMPONENT				Q3011	8-729-422-27	TRANSISTOR	2SD601A-Q		
FL3002	1-236-129-11	ENCAPSULATED COMPONENT				Q3012	8-729-422-27	TRANSISTOR	2SD601A-Q		
FL3003	1-236-129-11	ENCAPSULATED COMPONENT				Q3013	8-729-422-27	TRANSISTOR	2SD601A-Q		
FL3004	1-236-071-11	ENCAPSULATED COMPONENT				Q3014	8-729-422-27	TRANSISTOR	2SD601A-Q		
FL3005	1-236-071-11	ENCAPSULATED COMPONENT				Q3015	8-729-422-27	TRANSISTOR	2SD601A-Q		
FL3006	1-236-129-11	ENCAPSULATED COMPONENT				<RESISTOR>					
FL3007	1-236-164-11	ENCAPSULATED COMPONENT				R3001	1-216-073-00	METAL GLAZE	10K	5%	1/10W
FL3008	1-236-163-11	ENCAPSULATED COMPONENT				R3002	1-216-097-00	METAL GLAZE	100K	5%	1/10W
FL3009	1-236-164-11	ENCAPSULATED COMPONENT				R3003	1-216-073-00	METAL GLAZE	10K	5%	1/10W
FL3010	1-236-129-11	ENCAPSULATED COMPONENT				R3005	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
FL3011	1-236-163-11	ENCAPSULATED COMPONENT				R3006	1-216-049-00	METAL GLAZE	1K	5%	1/10W
FL3012	1-236-163-11	ENCAPSULATED COMPONENT				R3007	1-216-049-00	METAL GLAZE	1K	5%	1/10W
FL3013	1-236-163-11	ENCAPSULATED COMPONENT				R3008	1-216-049-00	METAL GLAZE	1K	5%	1/10W
FL3014	1-236-129-11	ENCAPSULATED COMPONENT				R3009	1-216-049-00	METAL GLAZE	1K	5%	1/10W
<IC>						R3010	1-216-049-00	METAL GLAZE	1K	5%	1/10W
IC3001	8-759-032-11	IC MC74HC04AF				R3011	1-216-049-00	METAL GLAZE	1K	5%	1/10W
IC3002	8-759-032-11	IC MC74HC04AF				R3012	1-216-093-00	METAL GLAZE	68K	5%	1/10W
IC3003	8-752-332-83	IC CXD1220AQ				R3013	1-216-097-00	METAL GLAZE	100K	5%	1/10W
IC3004	8-759-630-63	IC M5M4C500L-10K				R3014	1-216-091-00	METAL GLAZE	56K	5%	1/10W
IC3005	8-759-605-14	IC M52678P				R3015	1-216-097-00	METAL GLAZE	100K	5%	1/10W
					R3016	1-216-093-00	METAL GLAZE	68K	5%	1/10W	
					R3017	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
					R3018	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
					R3019	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
					R3020	1-216-017-00	METAL GLAZE	47	5%	1/10W	
					R3021	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
					R3022	1-216-049-00	METAL GLAZE	1K	5%	1/10W	

The components identified by shading and mark  are critical for safety  
Replace only with part number specified

Les composants identifiés par une trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

**KV-27XBR96S/32XBR96S**  
**RM-Y114A**

**P2 | G**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R3024	1-216-049-00	METAL GLAZE 1K 5% 1/10W			*A-1316-160-A	G BOARD, COMPLETE	
R3025	1-216-033-00	METAL GLAZE 220 5% 1/10W				*****	
R3026	1-216-049-00	METAL GLAZE 1K 5% 1/10W			4-382-854-11	SCREW (M3X10), P, SW (+)	
R3027	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W					
R3028	1-216-033-00	METAL GLAZE 220 5% 1/10W					
R3029	1-216-033-00	METAL GLAZE 220 5% 1/10W				<CAPACITOR>	
R3030	1-216-043-00	METAL GLAZE 560 5% 1/10W					
R3031	1-216-043-00	METAL GLAZE 560 5% 1/10W			C601	1-136-311-51	FILM 0.47MF 20% 125V
R3032	1-216-077-00	METAL GLAZE 15K 5% 1/10W			C602	1-162-599-81	CERAMIC 0.0047MF 20% 400V
R3033	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W			C603	1-162-599-81	CERAMIC 0.0047MF 20% 400V
					C604	1-128-588-11	ELECT 1000MF 20% 200V
R3034	1-216-033-00	METAL GLAZE 220 5% 1/10W			C605	1-162-599-12	CERAMIC 0.0047MF 20% 400V
R3035	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W					
R3036	1-216-049-00	METAL GLAZE 1K 5% 1/10W			C606	1-137-580-11	FILM 0.082MF 5% 100V
R3037	1-216-047-00	METAL GLAZE 820 5% 1/10W			C607	1-137-580-11	FILM 0.082MF 5% 100V
R3038	1-216-049-00	METAL GLAZE 1K 5% 1/10W			C608	1-137-580-11	FILM 0.082MF 5% 100V
					C609	1-137-580-11	FILM 0.082MF 5% 100V
R3039	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W			C610	1-137-588-11	FILM 0.0047MF 5% 800V
R3040	1-216-049-00	METAL GLAZE 1K 5% 1/10W					
R3041	1-216-033-00	METAL GLAZE 220 5% 1/10W			C611	1-137-592-11	FILM 0.01MF 5% 800V
R3042	1-216-077-00	METAL GLAZE 15K 5% 1/10W			C612	1-164-625-11	CERAMIC 680PF 10% 500V
R3043	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W			C613	1-164-625-11	CERAMIC 680PF 10% 500V
					C614	1-164-625-11	CERAMIC 680PF 10% 500V
R3044	1-216-049-00	METAL GLAZE 1K 5% 1/10W			C615	1-164-625-11	CERAMIC 680PF 10% 500V
R3045	1-216-077-00	METAL GLAZE 15K 5% 1/10W					
R3046	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W			C616	1-124-443-00	ELECT 100MF 20% 10V
R3047	1-216-049-00	METAL GLAZE 1K 5% 1/10W			C618	1-164-735-11	CAP, CERAMIC 1500PF
R3048	1-216-049-00	METAL GLAZE 1K 5% 1/10W			C619	1-164-735-11	CAP, CERAMIC 1500PF
					C620	1-161-741-51	CERAMIC 0.001MF 10% 400V
R3049	1-216-662-11	METAL CHIP 3K 0.50% 1/10W			C621	1-161-741-51	CERAMIC 0.001MF 10% 400V
R3050	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W					
R3051	1-216-089-00	METAL GLAZE 47K 5% 1/10W			C622	1-162-599-12	CERAMIC 0.0047MF 20% 400V
R3052	1-216-295-00	METAL GLAZE 0 5% 1/10W			C623	1-137-493-11	FILM 0.0047MF 5% 630V
R3054	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W			C624	1-126-301-11	ELECT 1MF 20% 50V
					C625	1-126-162-11	ELECT 3.3MF 20% 50V
R3055	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W			C626	1-130-480-00	MYLAR 0.0056MF 5% 50V
R3056	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W					
R3057	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W			C651	1-104-702-11	ELECT 470MF 20% 180V
R3058	1-216-049-00	METAL GLAZE 1K 5% 1/10W			C651	1-124-960-11	ELECT 470MF 20% 180V
R3059	1-216-689-11	METAL GLAZE 39K 5% 1/10W			C652	1-124-556-11	ELECT 2200MF 20% 16V
					C653	1-124-913-11	ELECT 470MF 20% 50V
R3060	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W			C654	1-124-607-11	ELECT 2200MF 20% 50V
R3061	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W					
R3062	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W			C655	1-162-117-00	CERAMIC 100PF 10% 500V
R3063	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W			C656	1-124-119-00	ELECT 330MF 20% 16V
R3064	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W			C657	1-106-351-00	MYLAR 0.0022MF 20% 200V
					C658	1-126-157-11	ELECT 10MF 20% 16V
R3065	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W			C659	1-130-485-00	MYLAR 0.015MF 5% 50V
R3066	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W					
R3067	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W			C661	1-124-484-11	ELECT 220MF 20% 35V
R3068	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W			C662	1-124-484-11	ELECT 220MF 20% 35V
R3069	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W			C663	1-126-104-11	ELECT 470MF 20% 35V
					C666	1-126-101-11	ELECT 100MF 20% 16V
R3070	1-216-047-00	METAL GLAZE 820 5% 1/10W			C667	1-124-443-00	ELECT 100MF 20% 10V
R3071	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W					
R3072	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W			C668	1-124-638-11	ELECT 22MF 20% 6.3V
R3073	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W			C669	1-162-318-11	CERAMIC 0.001MF 10% 500V
R3074	1-216-049-00	METAL GLAZE 1K 5% 1/10W			C670	1-162-318-11	CERAMIC 0.001MF 10% 500V
					C672	1-124-484-11	ELECT 220MF 20% 35V
R3080	1-216-358-91	METAL OXIDE 5.6 5% 1W F			C677	1-136-311-51	FILM 0.47MF 20% 125V
		<VARIABLE RESISTOR>			C678	1-124-360-00	ELECT 1000MF 20% 16V
RV3001	1-238-012-11	RES, ADJ, CARBON 1K					
RV3002	1-238-012-11	RES, ADJ, CARBON 1K				<CONNECTOR>	
					G3	*1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P
		<TRANSFORMER>			G4	*1-564-510-11	PLUG, CONNECTOR 7P
					G5	*1-564-507-11	PLUG, CONNECTOR 4P
T3001	1-404-607-11	COIL			G27	*1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P
T3002	1-404-607-11	COIL			G28	*1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P
					G29	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
					G31	*1-580-843-11	PIN, CONNECTOR (POWER)
					TP651	1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P

G

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
<DIODE>				IC654 8-719-156-73 PHOTO COUPLER PS2501-1LB			
D601 $\Delta$ 8-719-022-99 DIODE D6SB60L				<COIL>			
D602	8-719-510-48	DIODE DIN20R		L651	1-412-526-11	INDUCTOR 12UH	
D603	8-719-510-48	DIODE DIN20R		L652	1-410-673-31	INDUCTOR 68UH	
D604	8-719-510-48	DIODE DIN20R		L653	1-412-532-11	INDUCTOR 39UH	
D605	8-719-510-48	DIODE DIN20R		L654	1-412-532-11	INDUCTOR 39UH	
				L655	1-412-532-11	INDUCTOR 39UH	
D606	8-719-911-19	DIODE 1SS119					
D607	8-719-510-48	DIODE DIN20R		L656	1-412-526-11	INDUCTOR 12UH	
D608	8-719-510-48	DIODE DIN20R		<TRANSISTOR>			
D609	8-719-510-48	DIODE DIN20R		Q601	8-729-927-23	TRANSISTOR 2SC4664NPR-F	
D610	8-719-510-48	DIODE DIN20R		Q602	8-729-927-23	TRANSISTOR 2SC4664NPR-F	
D611	8-719-510-48	DIODE DIN20R		Q603	8-729-927-23	TRANSISTOR 2SC4664NPR-F	
D612	8-719-510-48	DIODE DIN20R		Q604	8-729-927-23	TRANSISTOR 2SC4664NPR-F	
D613	8-719-109-93	DIODE RD6.2ESB2		Q605	8-729-209-15	TRANSISTOR 2SD2012	
D651	8-719-027-43	DIODE S2L20UF					
D652	8-719-027-43	DIODE S2L20UF		Q652	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D653	8-719-027-43	DIODE S2L20UF		Q653	8-729-201-53	TRANSISTOR 2SA1015-GR	
D654	8-719-027-43	DIODE S2L20UF		Q654	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D655	8-719-510-13	DIODE D10SC4MR		Q655	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D656	8-719-022-97	DIODE D2S4MF		Q656	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D657	8-719-510-02	DIODE D1NS4		<RESISTOR>			
D658	8-719-027-22	DIODE D3S6M-F		R601	1-249-388-11	CARBON 3.9 5% 1/4W F	
D659	8-719-027-22	DIODE D3S6M-F		R602 $\Delta$ 1-205-707-12	WIREWOUND 2.2 5% 10W		
D660	8-719-027-22	DIODE D3S6M-F		R603	1-247-889-00	CARBON 270K 5% 1/4W	
D661	8-719-027-22	DIODE D3S6M-F		R604 $\Delta$ 1-216-443-91	METAL OXIDE 56K 5% 1W F		
D663	8-719-510-02	DIODE D1NS4		R605 $\Delta$ 1-216-443-91	METAL OXIDE 56K 5% 1W F		
D665	8-719-510-02	DIODE D1NS4		R606 $\Delta$ 1-216-443-91	METAL OXIDE 56K 5% 1W F		
D666	8-719-109-85	DIODE RD5.1ESB2		R607 $\Delta$ 1-216-443-91	METAL OXIDE 56K 5% 1W F		
D667	8-719-911-19	DIODE 1SS119		R608 $\Delta$ 1-216-352-91	METAL OXIDE 1.8 5% 1W F		
D668	8-719-911-19	DIODE 1SS119		R609 $\Delta$ 1-216-352-91	METAL OXIDE 1.8 5% 1W F		
D669	8-719-109-54	DIODE RD2.2ESB2		R610 $\Delta$ 1-216-352-91	METAL OXIDE 1.8 5% 1W F		
D670	8-719-911-19	DIODE 1SS119		R611 $\Delta$ 1-216-352-91	METAL OXIDE 1.8 5% 1W F		
D671	8-719-110-31	DIODE RD12ESB2		R612	1-249-377-11	CARBON 0.47 5% 1/4W F	
D672	8-719-911-19	DIODE 1SS119		R613	1-215-447-00	METAL 12K 1% 1/4W	
<FUSE>				R614	1-215-433-00	METAL 3.3K 1% 1/4W	
F1 $\Delta$ 1-532-783-21	FUSE, MICRO (SECONDARY) 5A/125V			R615	1-249-441-11	CARBON 100K 5% 1/4W	
F601 $\Delta$ 1-576-222-11	FUSE 6.3A/125V			R616	1-249-417-11	CARBON 1K 5% 1/4W	
	1-533-190-11 CLIP, FUSE; F601			R617	1-249-417-11	CARBON 1K 5% 1/4W	
F602 $\Delta$ 1-576-107-22	FUSE 3.15A/250V			R618	1-247-688-11	CARBON 10 5% 1/4W F	
	1-533-223-11 CLIP, FUSE; F602			R619 $\Delta$ 1-216-343-91	METAL OXIDE 0.33 5% 1W F		
<FERRITE BEAD>				R620	1-202-730-00	SOLID 8.2M 20% 1/2W	
FB651	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		R621	1-249-423-11	CARBON 3.3K 5% 1/4W	
FB652	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		R622 $\Delta$ 1-202-888-91	SOLID 2.2M 20% 1/2W		
FB653	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		R623	1-212-956-00	FUSIBLE 8.2 5% 1/2W F	
FB654	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		R651	1-249-405-11	CARBON 100 5% 1/4W F	
FB655	1-412-911-11	INDUCTOR, FERRITE BEAD		R652 $\Delta$ 1-215-868-91	METAL OXIDE 680 5% 1W F		
FB656	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		R653	1-249-405-11	CARBON 100 5% 1/4W	
FB659	1-412-911-11	INDUCTOR, FERRITE BEAD		R654	1-249-399-11	CARBON 33 5% 1/4W F	
FB660	1-412-911-11	INDUCTOR, FERRITE BEAD		R655	1-249-393-11	CARBON 10 5% 1/4W F	
FB661	1-412-911-11	INDUCTOR, FERRITE BEAD		R656	1-249-443-11	CARBON 0.47 5% 1/4W F	
FB662	1-412-911-11	INDUCTOR, FERRITE BEAD		R657 $\Delta$ 1-216-357-91	METAL OXIDE 4.7 5% 1W F		
FB663	1-412-911-11	INDUCTOR, FERRITE BEAD		R658	1-215-408-00	METAL 300 1% 1/4W	
FB669	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		R659	1-249-443-11	CARBON 0.47 5% 1/4W F	
FB670	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		R660	1-215-446-00	METAL 11K 1% 1/4W	
<IC>				R661	1-215-418-00	METAL 750 1% 1/4W	
IC651 $\Delta$ 1-809-524-12	POWER MODULE DM-44A			R662	1-249-421-11	CARBON 2.2K 5% 1/4W	
				R663	1-249-410-11	CARBON 270 5% 1/4W	
				R664 $\Delta$ 1-215-861-91	METAL OXIDE 47 5% 1W F		
				R665	1-215-403-00	METAL 180 1% 1/4W	

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KV-27XBR96S/32XBR96S  
RM-Y114A



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R666	1-215-421-00	METAL	1K 1% 1/4W	<CONNECTOR>			
R667	1-215-432-00	METAL	3K 1% 1/4W	C2	*1-573-964-11	PIN, CONNECTOR (PC BOARD) 6P	
R668 $\Delta$	1-216-482-51	METAL OXIDE	1.8K 5% 3W F	C24	*1-564-511-51	PLUG, CONNECTOR 8P	
R669	1-249-421-11	CARBON	2.2K 5% 1/4W	C42	*1-691-134-11	PIN, CONNECTOR (PC BOARD) 2P	
R670	1-249-412-11	CARBON	390 5% 1/4W	<DIODE>			
R671 $\Delta$	1-216-384-51	METAL OXIDE	0.39 5% 3W F	D701	8-719-911-19	DIODE 1SS119	
R672	1-249-443-11	CARBON	0.47 5% 1/4W F	D702	8-719-911-19	DIODE 1SS119	
R673	1-249-415-11	CARBON	680 5% 1/4W	D703	8-719-911-19	DIODE 1SS119	
R674	1-249-421-11	CARBON	2.2K 5% 1/4W	D704	8-719-911-19	DIODE 1SS119	
R675	1-249-415-11	CARBON	680 5% 1/4W	D705	8-719-911-19	DIODE 1SS119	
R676	1-249-377-11	CARBON	0.47 5% 1/4W F	D706	8-719-911-19	DIODE 1SS119	
R677	1-249-433-11	CARBON	22K 5% 1/4W	D707	8-719-911-19	DIODE 1SS119	
R678	1-249-429-11	CARBON	10K 5% 1/4W	D708	8-719-911-19	DIODE 1SS119	
R679 $\Delta$	1-216-428-91	METAL OXIDE	180 5% 1W F	D709	8-719-911-19	DIODE 1SS119	
R680 $\Delta$	1-216-428-91	METAL OXIDE	180 5% 1W F	D710	8-719-901-83	DIODE 1SS83	
R681	1-249-377-11	CARBON	0.47 5% 1/4W F	D711	8-719-901-83	DIODE 1SS83	
R682	1-249-443-11	CARBON	0.47 5% 1/4W F	D712	8-719-901-83	DIODE 1SS83	
<RELAY>				D713	8-719-901-83	DIODE 1SS83	
RY601	1-515-516-00	RELAY		D714	8-719-911-19	DIODE 1SS119	
RY602 $\Delta$	1-515-669-21	RELAY		<JACK>			
<TRANSFORMER>				J701 $\Delta$	1-540-223-11	SOCKET, PICTURE TUBE	
T601 $\Delta$	1-424-585-11	TRANSFORMER, LINE FILTER		<COIL>			
T602 $\Delta$	1-424-585-11	TRANSFORMER, LINE FILTER		L701	1-410-671-31	INDUCTOR 47UH	
T603	1-450-300-31	TRANSFORMER, CONVERTER DRIVE		L702	1-410-645-31	INDUCTOR 100UH	
T604 $\Delta$	1-450-958-12	TRANSFORMER, CONVERTER (PRT)		L703	1-410-677-31	INDUCTOR 180UH	
T605	1-424-663-11	TRANSFORMER, FERRITE (SBT)		L706	1-410-677-31	INDUCTOR 180UH	
<THERMISTOR>				<TRANSISTOR>			
THP601 $\Delta$	1-809-539-11	THERMISTOR, POSITIVE		Q701	8-729-326-11	TRANSISTOR 2SC2611	
<VARISTOR>				Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
VDR601 $\Delta$	1-809-786-11	VARISTOR		Q703	8-729-200-17	TRANSISTOR 2SA1091-0	
VDR602	1-809-264-71	VARISTOR		Q704	8-729-326-11	TRANSISTOR 2SC2611	
*****				Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE	
*A-1331-271-A C BOARD, COMPLETE				Q706	8-729-200-17	TRANSISTOR 2SA1091-0	
*****				Q707	8-729-200-17	TRANSISTOR 2SA1091-0	
<CAPACITOR>				Q708	8-729-326-11	TRANSISTOR 2SC2611	
C701	1-162-116-00	CERAMIC	680PF 10% 2KV	Q709	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C702	1-137-490-11	FILM	0.01MF 10% 1KV	Q710	8-729-255-12	TRANSISTOR 2SC2551-0	
C704	1-123-946-00	ELECT	4.7MF 20% 250V	Q711	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C705	1-106-375-12	MYLAR	0.022MF 200V	Q712	8-729-255-12	TRANSISTOR 2SC2551-0	
C706	1-106-375-12	MYLAR	0.022MF 200V	Q714	8-729-200-17	TRANSISTOR 2SA1091-0	
C707	1-164-083-11	CERAMIC	680PF 10% 50V	Q715	8-729-200-17	TRANSISTOR 2SA1091-0	
C708	1-164-083-11	CERAMIC	680PF 10% 50V	Q716	8-729-200-17	TRANSISTOR 2SA1091-0	
C709	1-164-083-11	CERAMIC	680PF 10% 50V	<RESISTOR>			
C710	1-164-083-11	CERAMIC	680PF 10% 50V	R702	1-202-883-11	SOLID 680K 20% 1/2W	
C711	1-124-120-11	ELECT	220MF 20% 16V	R703	1-202-838-00	SOLID 100K 20% 1/2W	
C712	1-164-082-11	CERAMIC	560PF 10% 50V	R705	1-249-433-11	CARBON 22K 5% 1/4W	
C713	1-164-083-11	CERAMIC	680PF 10% 50V	R706	1-202-815-11	SOLID 47K 20% 1/2W	
C715	1-102-129-00	CERAMIC	0.01MF 10% 50V	R707	1-202-842-11	SOLID 220K 20% 1/2W	
C718	1-102-129-00	CERAMIC	0.01MF 10% 50V	R708	1-202-818-00	SOLID 1K 20% 1/2W	
C733	1-102-074-00	CERAMIC	0.001MF 10% 50V	R709	1-202-818-00	SOLID 1K 20% 1/2W	
				R710	1-202-818-00	SOLID 1K 20% 1/2W	
				R711	1-249-433-11	CARBON 22K 5% 1/4W	
				R713 $\Delta$	1-216-486-51	METAL OXIDE 8.2K 5% 3W F	
				R715	1-202-549-00	SOLID 100 10% 1/2W	
				R716 $\Delta$	1-216-486-51	METAL OXIDE 8.2K 5% 3W F	
				R720 $\Delta$	1-216-486-51	METAL OXIDE 8.2K 5% 3W F	

C

D

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R722	1-249-433-11	CARBON	22K 5% 1/4W	C820	1-126-103-11	ELECT	470MF 20% 16V
R723	1-249-405-11	CARBON	100 5% 1/4W	C901	1-136-173-00	FILM	0.47MF 5% 50V
R724	1-249-405-11	CARBON	100 5% 1/4W	C902	1-124-261-00	ELECT	10MF 20% 50V
R725	1-249-429-11	CARBON	10K 5% 1/4W	C903	1-136-169-00	FILM	0.22MF 5% 50V
R726	1-249-408-11	CARBON	180 5% 1/4W	C904	1-130-471-00	MYLAR	0.001MF 5% 50V
R727	1-249-429-11	CARBON	10K 5% 1/4W	C905	1-124-261-00	ELECT	10MF 20% 50V
R728	1-249-408-11	CARBON	180 5% 1/4W	C906	1-124-046-00	ELECT	10MF 20% 160V
R729	1-249-405-11	CARBON	100 5% 1/4W	C907	1-124-465-00	ELECT	0.47MF 20% 50V
R730	1-249-408-11	CARBON	180 5% 1/4W	C908	1-102-112-00	CERAMIC	330PF 10% 50V
R731	1-249-409-11	CARBON	220 5% 1/4W F	C910	1-136-103-00	FILM	0.1MF 5% 200V
R732	1-249-409-11	CARBON	220 5% 1/4W F	C911	1-136-165-00	FILM	0.1MF 5% 50V
R733	1-249-409-11	CARBON	220 5% 1/4W F	C913	1-124-589-11	ELECT	47MF 20% 16V
R735	1-249-418-11	CARBON	1.2K 5% 1/4W	C914	1-106-367-00	MYLAR	0.01MF 10% 100V
R737	1-249-418-11	CARBON	1.2K 5% 1/4W	C915	1-126-301-11	ELECT	1MF 20% 50V
R739	1-249-433-11	CARBON	22K 5% 1/4W	C917	1-130-471-00	MYLAR	0.001MF 5% 50V
R740 Δ	1-215-902-91	METAL OXIDE	47K 5% 2W F	C918	1-102-074-00	CERAMIC	0.001MF 10% 50V
R741	1-249-417-11	CARBON	1K 5% 1/4W F	C920	1-136-601-11	FILM	0.01MF 5% 630V
R742	1-249-423-11	CARBON	3.3K 5% 1/4W F	C922	1-124-557-11	ELECT	1000MF 20% 25V
R743	1-249-423-11	CARBON	3.3K 5% 1/4W F	C923	1-130-471-00	MYLAR	0.001MF 5% 50V
R744	1-249-423-11	CARBON	3.3K 5% 1/4W F	C925	1-124-261-00	ELECT	10MF 20% 50V
R745	1-249-417-11	CARBON	1K 5% 1/4W F	C926	1-136-165-00	FILM	0.1MF 5% 50V
R746 Δ	1-215-879-91	METAL OXIDE	47K 5% 1W F	C927	1-136-171-00	FILM	0.33MF 5% 50V
R747	1-249-429-11	CARBON	10K 5% 1/4W F	C928	1-124-261-00	ELECT	10MF 20% 50V
R748 Δ	1-216-365-91	METAL OXIDE	0.47 5% 2W F	C930	1-130-483-00	MYLAR	0.01MF 5% 50V
R749	1-249-437-11	CARBON	47K 5% 1/4W	C931	1-130-475-00	MYLAR	0.0022MF 10% 50V
R750	1-249-409-11	CARBON	220 5% 1/4W F	<CONNECTOR>			
R751	1-249-395-11	CARBON	15 5% 1/4W	D14	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P	
R752	1-249-393-11	CARBON	10 5% 1/4W	D18	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P	
R753	1-249-390-11	CARBON	5.6 5% 1/4W	D20	1-564-524-11	PLUG, CONNECTOR 9P	
R754	1-249-418-11	CARBON	1.2K 5% 1/4W	DY2	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
R777	1-249-441-11	CARBON	100K 5% 1/4W	<DIODE>			
<VARIABLE RESISTOR>				D801	8-719-987-87	DIODE ERA85-009	
RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M		D802	8-719-911-19	DIODE 1SS119	
RV702	1-241-714-11	RES, ADJ, METAL FILM 110M		D803	8-719-911-19	DIODE 1SS119	
*****				D804	8-719-911-19	DIODE 1SS119	
*A-1341-664-A	D BOARD, COMPLETE (KV-27XBR96S(U/C))			D805	8-719-801-35	THYRISTOR SHOR3D42	
*****				D806	8-719-980-78	DIODE ERA83-006	
*A-1341-678-A	D BOARD, COMPLETE (KV-32XBR96S(U/C))			D807	8-719-980-78	DIODE ERA83-006	
*****				D808	8-719-911-19	DIODE 1SS119	
4-382-854-11	SCREW (M3X10), P, SW (+)			D809	8-719-911-19	DIODE 1SS119	
<CAPACITOR>				D810	8-719-911-19	DIODE 1SS119	
C801	1-124-589-11	ELECT	47MF 20% 16V	D811	8-719-302-43	DIODE EL1Z	
C802	1-124-589-11	ELECT	47MF 20% 16V	D812	8-719-911-19	DIODE 1SS119	
C804	1-130-483-00	MYLAR	0.01MF 5% 50V	D813	8-719-109-88	DIODE RD5.6ESB1	
C805	1-136-165-00	FILM	0.1MF 5% 50V	D814	8-719-121-24	DIODE RD9.1ESL	
C806	1-136-165-00	FILM	0.1MF 5% 50V	D815	8-719-911-19	DIODE 1SS119	
C807	1-124-360-00	ELECT	1000MF 20% 16V	D816	8-719-911-19	DIODE 1SS119	
C809	1-136-104-00	FILM	0.16MF 5% 200V	D901	8-719-911-19	DIODE 1SS119	
C810	1-136-177-00	FILM	1MF 5% 50V	D902	8-719-109-96	DIODE RD6.8ESB1	
C811	1-162-318-11	CERAMIC	0.001MF 10% 500V	D903	8-719-979-85	DIODE EGP20G	
C812	1-126-163-11	ELECT	4.7MF 20% 50V	D906	8-719-980-78	DIODE ERA83-006	
C813	1-130-491-00	MYLAR	0.047MF 5% 50V	D907	8-719-911-19	DIODE 1SS119	
C814	1-124-261-00	ELECT	10MF 20% 50V	D908	8-719-980-78	DIODE ERA83-006	
C815	1-124-261-00	ELECT	10MF 20% 50V	D911	8-719-911-19	DIODE 1SS119	
C816	1-124-234-00	ELECT	22MF 20% 16V	<IC>			
C817	1-126-163-11	ELECT	4.7MF 20% 50V	IC801	8-749-920-58	IC SI-3090CA	
C818	1-124-589-11	ELECT	47MF 20% 16V	IC802	8-752-052-88	IC CXA1526P	
C819	1-136-165-00	FILM	0.1MF 5% 50V	IC803	8-759-135-80	IC UPC358C	

The components identified by shading and mark  $\Delta$  are critical for safety  
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Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité  
Ne les remplacer que par une pièce portant le numéro spécifié.


KV-27XBR96S/32XBR96S  
RM-Y114A

D

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
IC901	8-759-135-80	IC UPC358C		R830	1-249-411-11	CARBON	330 5% 1/4W
IC903	8-759-987-16	IC LM393P		R831	1-249-426-11	CARBON	5.6K 5% 1/4W
<COIL>				R832 $\Delta$	1-215-887-91	METAL OXIDE	150 5% 2W F
				R833	1-249-421-11	CARBON	2.2K 5% 1/4W
				R834	1-249-438-11	CARBON	56K 5% 1/4W
L801	1-459-592-11	COIL (WITH CORE) (PMC)		R835	1-249-393-11	CARBON	10 5% 1/4W
L802	1-459-941-12	COIL, CHOKE 3.4MMH		R836	1-249-435-11	CARBON	33K 5% 1/4W
L901	1-410-093-11	INDUCTOR 33MMH		R837	1-249-435-11	CARBON	33K 5% 1/4W
L902	1-459-075-00	COIL, DYNAMIC CONVERSION CHOKE		R838 $\Delta$	1-216-359-91	METAL OXIDE	6.8 5% 1W F
				R839	1-249-410-11	CARBON	270 5% 1/4W
<TRANSISTOR>				R840	1-249-429-11	CARBON	10K 5% 1/4W
Q802	8-729-119-76	TRANSISTOR 2SA1175-HFE		R841	1-249-437-11	CARBON	47K 5% 1/4W
Q803	8-729-119-78	TRANSISTOR 2SC2785-HFE		R842	1-249-429-11	CARBON	10K 5% 1/4W
Q804	8-729-119-78	TRANSISTOR 2SC2785-HFE		R843	1-249-421-11	CARBON	2.2K 5% 1/4W
Q805	8-729-140-97	TRANSISTOR 2SB734-34		R901	1-249-425-11	CARBON	4.7K 5% 1/4W
Q806	8-729-119-78	TRANSISTOR 2SC2785-HFE		R902	1-249-438-11	CARBON	56K 5% 1/4W
Q807	8-729-140-97	TRANSISTOR 2SB734-34		R903	1-249-429-11	CARBON	10K 5% 1/4W
Q808	8-729-119-76	TRANSISTOR 2SA1175-HFE		R904	1-249-429-11	CARBON	10K 5% 1/4W
Q809	8-729-209-15	TRANSISTOR 2SD2012		R905	1-249-429-11	CARBON	10K 5% 1/4W
Q810	8-729-140-96	TRANSISTOR 2SD774-34		R906	1-249-425-11	CARBON	4.7K 5% 1/4W
Q811	8-729-119-78	TRANSISTOR 2SC2785-HFE		R907	1-249-429-11	CARBON	10K 5% 1/4W
Q901	8-729-119-76	TRANSISTOR 2SA1175-HFE		R908	1-249-437-11	CARBON	47K 5% 1/4W
Q902	8-729-119-78	TRANSISTOR 2SC2785-HFE		R909	1-249-433-11	CARBON	22K 5% 1/4W
Q903	8-729-119-78	TRANSISTOR 2SC2785-HFE		R910	1-249-431-11	CARBON	15K 5% 1/4W
Q904	8-729-119-76	TRANSISTOR 2SA1175-HFE		R911	1-247-895-00	CARBON	470K 5% 1/4W
Q905	8-729-119-76	TRANSISTOR 2SA1175-HFE		R912	1-249-429-11	CARBON	10K 5% 1/4W
Q906	8-729-119-80	TRANSISTOR 2SC2688-LK		R913	1-249-425-11	CARBON	4.7K 5% 1/4W
Q907	8-729-119-80	TRANSISTOR 2SC2688-LK		R914	1-249-401-11	CARBON	47 5% 1/4W
Q908	8-729-300-80	TRANSISTOR 2SB860		R915	1-249-425-11	CARBON	4.7K 5% 1/4W
Q909	8-729-140-96	TRANSISTOR 2SD774-34		R916	1-249-421-11	CARBON	2.2K 5% 1/4W
Q910	8-729-119-78	TRANSISTOR 2SC2785-HFE		R917	1-249-439-11	CARBON	68K 5% 1/4W
Q911	8-729-119-78	TRANSISTOR 2SC2785-HFE		R918	1-249-413-11	CARBON	470 5% 1/4W
Q912	8-729-119-76	TRANSISTOR 2SA1175-HFE		R919	1-249-437-11	CARBON	47K 5% 1/4W
Q913	8-729-011-02	TRANSISTOR 2SK1917		R920	1-249-418-11	CARBON	1.2K 5% 1/4W F
Q914	8-729-119-76	TRANSISTOR 2SA1175-HFE		R921 $\Delta$	1-215-876-91	METAL OXIDE	15K 5% 1W F
<RESISTOR>				R922 $\Delta$	1-215-870-91	METAL OXIDE	1.5K 5% 1W F
R801	1-249-409-11	CARBON	220 5% 1/4W	R923	1-249-429-11	CARBON	10K 5% 1/4W
R802	1-249-409-11	CARBON	220 5% 1/4W	R924	1-249-423-11	CARBON	3.3K 5% 1/4W
R804	1-247-891-00	CARBON	330K 5% 1/4W	R925	1-249-415-11	CARBON	680 5% 1/4W
R806	1-247-885-00	CARBON	180K 5% 1/4W	R926	1-249-409-11	CARBON	220 5% 1/4W
R807	1-247-891-00	CARBON	330K 5% 1/4W	R927	1-249-429-11	CARBON	10K 5% 1/4W
R808	1-215-461-00	METAL	47K 1% 1/4W	R928	1-249-421-11	CARBON	2.2K 5% 1/4W
R809	1-249-423-11	CARBON	3.3K 5% 1/4W	R929	1-249-429-11	CARBON	10K 5% 1/4W
R810	1-249-413-11	CARBON	470 5% 1/4W	R930	1-249-434-11	CARBON	27K 5% 1/4W
R811	1-249-434-11	CARBON	27K 5% 1/4W	R931	1-249-421-11	CARBON	2.2K 5% 1/4W
R812	1-249-438-11	CARBON	56K 5% 1/4W	R933	1-249-421-11	CARBON	2.2K 5% 1/4W
R813	1-249-417-11	CARBON	1K 5% 1/4W	R934	1-249-439-11	CARBON	68K 5% 1/4W
R815	1-249-427-11	CARBON	6.8K 5% 1/4W	R935	1-249-429-11	CARBON	10K 5% 1/4W
R816	1-249-425-11	CARBON	4.7K 5% 1/4W	R936	1-249-429-11	CARBON	10K 5% 1/4W
R817	1-249-422-11	CARBON	2.7K 5% 1/4W	R937	1-249-421-11	CARBON	2.2K 5% 1/4W
R818	1-249-417-11	CARBON	1K 5% 1/4W	R938	1-249-405-11	CARBON	100 5% 1/4W
R819	1-249-432-11	CARBON	18K 5% 1/4W	R939	1-249-405-11	CARBON	100 5% 1/4W F
R820	1-249-417-11	CARBON	1K 5% 1/4W	R940	1-249-405-11	CARBON	100 5% 1/4W F
R821 $\Delta$	1-216-379-91	METAL OXIDE	6.8 5% 2W F	R941	1-249-405-11	CARBON	100 5% 1/4W
R822	1-249-423-11	CARBON	3.3K 5% 1/4W	R944	1-249-432-11	CARBON	18K 5% 1/4W
R824	1-249-417-11	CARBON	1K 5% 1/4W F	R945	1-247-895-00	CARBON	470K 5% 1/4W
R825 $\Delta$	1-215-857-91	METAL OXIDE	10 5% 1W F	R946	1-249-425-11	CARBON	4.7K 5% 1/4W
R826	1-249-404-00	CARBON	82 5% 1/4W	R947	1-249-419-11	CARBON	1.5K 5% 1/4W F
R827 $\Delta$	1-215-875-91	METAL OXIDE	10K 5% 1W F	R948	1-249-435-11	CARBON	33K 5% 1/4W
R828	1-249-441-11	CARBON	100K 5% 1/4W	R950	1-249-425-11	CARBON	4.7K 5% 1/4W
R829	1-249-414-11	CARBON	560 5% 1/4W	R952	1-249-405-11	CARBON	100 5% 1/4W
				R953	1-247-889-00	CARBON	270K 5% 1/4W
				R954	1-247-889-00	CARBON	270K 5% 1/4W
				R956	1-249-433-11	CARBON	22K 5% 1/4W

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VC

The components identified by shading and mark  are critical for safety.  
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK		
R955	1-249-421-11	CARBON	2.2K	5%	1/4W
R962	1-249-409-11	CARBON	220	5%	1/4W
R963	1-249-419-11	CARBON	1.5K	5%	1/4W
R964	1-247-734-11	CARBON	39	5%	1/2W F
R965	1-249-414-11	CARBON	560	5%	1/4W F
R966	1-249-418-11	CARBON	1.2K	5%	1/4W
R968	1-249-418-11	CARBON	1.2K	5%	1/4W
R969	1-249-384-11	CARBON	1.8	5%	1/4W F
R970	1-249-435-11	CARBON	33K	5%	1/4W
R972	1-249-432-11	CARBON	18K	5%	1/4W
R974	1-216-476-51	METAL OXIDE	180	5%	3W F
R975	1-249-417-11	CARBON	1K	5%	1/4W F
R976	1-249-432-11	CARBON	18K	5%	1/4W
R977	1-249-438-11	CARBON	56K	5%	1/4W
R978	1-249-430-11	CARBON	12K	5%	1/4W
R979	1-249-414-11	CARBON	560	5%	1/4W
R980	1-249-420-11	CARBON	1.8K	5%	1/4W
R981	1-249-415-11	CARBON	680	5%	1/4W
R982	1-249-384-11	CARBON	1.8	5%	1/4W F
R983	1-249-441-11	CARBON	100K	5%	1/4W
R984	1-249-405-11	CARBON	100	5%	1/4W
R985	1-249-400-11	CARBON	39	5%	1/4W F
R986	1-249-435-11	CARBON	33K	5%	1/4W
R987	1-249-428-11	CARBON	8.2K	5%	1/4W
R988	1-249-418-11	CARBON	1.2K	5%	1/4W
R989	1-249-413-11	CARBON	470	5%	1/4W
R990	1-216-451-91	METAL OXIDE	120	5%	2W F
R991	1-249-409-11	CARBON	220	5%	1/4W
*****					
*A-1347-079-A	VC BOARD, COMPLETE (KV-27XBR96S(U/C))				
*A-1347-081-A	VC BOARD, COMPLETE (KV-32XBR96S(U/C))				
*****					
3-710-578-01	COVER, VOLUME, 6 MOLD				
<CAPACITOR>					
C1801	1-124-478-11	ELECT	100MF	20%	25V
C1802	1-124-478-11	ELECT	100MF	20%	25V
C1803	1-130-487-00	MYLAR	0.022MF	5%	50V
C1804	1-102-973-00	CERAMIC	100PF	5%	50V
C1805	1-130-471-00	FILM	0.001MF	5%	50V
C1806	1-130-487-00	MYLAR	0.022MF	5%	50V
C1807	1-130-471-00	MYLAR	0.001MF	5%	50V
C1808	1-102-228-00	CERAMIC	470PF	10%	500V
C1809	1-124-798-11	ELECT	1MF	20%	160V
C1810	1-130-495-00	MYLAR	0.1MF	5%	50V
C1811	1-124-798-11	ELECT	1MF	20%	160V
C1812	1-136-104-00	FILM	0.16MF	5%	200V
C1812	1-136-756-11	FILM	0.24MF	5%	200V
				(KV-27XBR96S(U/C))	
				(KV-32XBR96S(U/C))	
C1813	1-129-765-00	FILM	0.047F	10%	200V
				(KV-27XBR96S(U/C))	
<CONNECTOR>					
VC15	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P			

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KV-27XBR96S/32XBR96S  
RM-Y114A

VC

HX1

HX2

U

REF.NO.	PART NO.	DESCRIPTION	REMARK
<DIODE>			
D1801	8-719-911-19	DIODE 1SS119	
D1802	8-719-911-19	DIODE 1SS119	
D1803	8-719-302-43	DIODE EL1Z	
D1804	8-719-302-43	DIODE EL1Z	
D1805	8-719-302-43	DIODE EL1Z	
<IC>			
IC1801	8-759-987-16	IC LM393P	
IC1802	8-759-987-16	IC LM393P	
IC1803	8-759-168-20	IC TA78L09S	
<COIL>			
L1801	1-460-200-11	COIL (WITH CORE)	
<TRANSISTOR>			
Q1801	8-729-012-26	TRANSISTOR IRF540Y	
Q1802	8-729-012-26	TRANSISTOR IRF540Y	
Q1803	8-729-931-45	TRANSISTOR IRF614	
<RESISTOR>			
R1801	1-249-435-11	CARBON 33K 5% 1/4W	
R1802	1-249-417-11	CARBON 1K 5% 1/4W	
R1803	1-247-887-00	CARBON 220K 5% 1/4W	
R1804	1-249-437-11	CARBON 47K 5% 1/4W	
R1805	1-247-895-00	CARBON 470K 5% 1/4W	
R1806	1-249-427-11	CARBON 6.8K 5% 1/4W	
R1806	1-249-428-11	CARBON 8.2K 5% 1/4W	(KV-27XBR96S(U/C))
R1807	1-249-423-11	CARBON 3.3K 5% 1/4W	(KV-32XBR96S(U/C))
R1808	1-249-426-11	CARBON 5.6K 5% 1/4W	
R1809	1-249-433-11	CARBON 22K 5% 1/4W	
R1810	1-249-421-11	CARBON 2.2K 5% 1/4W	
R1811A	1-216-463-91	METAL OXIDE 12K 5% 2W F	
R1812A	1-215-875-91	METAL OXIDE 10K 5% 1W F	
R1813	1-249-405-11	CARBON 100 5% 1/4W	
R1814	1-249-441-11	CARBON 100K 5% 1/4W	
R1815A	1-215-869-91	METAL OXIDE 1K 5% 1W F	
R1816	1-249-434-11	CARBON 27K 5% 1/4W	(KV-27XBR96S(U/C))
R1816	1-249-437-11	CARBON 47K 5% 1/4W	(KV-32XBR96S(U/C))
R1817	1-249-441-11	CARBON 100K 5% 1/4W	
R1818	1-249-406-11	CARBON 120 5% 1/4W	
<VARIABLE RESISTOR>			
RV1801	1-228-993-00	RES, ADJ, METAL GLAZE 4.7K	
<TRANSFORMER>			
T1801	1-437-212-11	TRANSFORMER, FERRITE (VPDT)	

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\*1-643-663-11 HX1 BOARD  
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\*4-348-208-00 HOLDER, LED

REF.NO.	PART NO.	DESCRIPTION	REMARK
<CAPACITOR>			
C1603	1-124-589-11	ELECT 47MF 20% 16V	
C1604	1-124-589-11	ELECT 47MF 20% 16V	
<DIODE>			
D1601	8-719-812-41	DIODE TLR124	
D1602	8-719-812-41	DIODE TLR124	
<CONNECTOR>			
HX137	*1-564-514-11	PLUG, CONNECTOR 11P	
<IC>			
IC1601	8-741-148-33	IC SBX1483-59	
<RESISTOR>			
R1601	1-249-408-11	CARBON 180 5% 1/4W	
R1602	1-249-407-11	CARBON 150 5% 1/4W	
R1604	1-249-419-11	CARBON 1.5K 5% 1/4W	
R1605	1-249-421-11	CARBON 2.2K 5% 1/4W	
R1606	1-249-425-11	CARBON 4.7K 5% 1/4W	
R1607	1-249-430-11	CARBON 12K 5% 1/4W	
<SWITCH>			
S1601	1-572-198-11	SWITCH, KEYBOARD	
S1604	1-572-198-11	SWITCH, KEYBOARD	
S1605	1-572-198-11	SWITCH, KEYBOARD	
S1606	1-572-198-11	SWITCH, KEYBOARD	
S1607A	1-572-198-11	SWITCH, KEYBOARD (POWER)	
*****			
*1-643-664-11		HX2 BOARD	*****
<CONNECTOR>			
HX2-49	*1-564-518-11	PLUG, CONNECTOR 3P	
HX216	*1-564-525-11	PLUG, CONNECTOR 10P	
<DIODE>			
D1650	8-719-108-12	DIODE RD9.1EW	
D1651	8-719-108-12	DIODE RD9.1EW	
D1652	8-719-108-12	DIODE RD9.1EW	
D1653	8-719-108-12	DIODE RD9.1EW	
D1654	8-719-108-12	DIODE RD9.1EW	
D1655	8-719-108-12	DIODE RD9.1EW	
<JACK>			
J1650	1-695-307-11	TERMINAL BLOCK, S 3P	
*****			
*A-1373-421-A		U BOARD, COMPLETE	*****
<CAPACITOR>			
C1004	1-102-125-00	CERAMIC 0.0047MF 10% 50V	

U

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C1005	1-126-301-11	ELECT	1MF	20%	50V		
C1006	1-164-096-11	CERAMIC	0.01MF		50V		
C1007	1-124-598-11	ELECT	22MF	20%	25V		
C1008	1-124-598-11	ELECT	22MF	20%	25V		
C1010	1-124-465-00	ELECT	0.47MF	20%	50V		
C1011	1-124-465-00	ELECT	0.47MF	20%	50V		
C1012	1-124-465-00	ELECT	0.47MF	20%	50V		
C1013	1-102-125-00	CERAMIC	0.0047MF	10%	50V		
C1014	1-126-163-11	ELECT	4.7MF	20%	50V		
C1016	1-126-163-11	ELECT	4.7MF	20%	50V		
C1018	1-126-301-11	ELECT	1MF	20%	50V		
C1020	1-124-242-00	ELECT	33MF	20%	25V		
C1021	1-124-465-00	ELECT	0.47MF	20%	50V		
C1022	1-124-242-00	ELECT	33MF	20%	25V		
C1026	1-164-048-11	CERAMIC	12PF	5%	50V		
C1027	1-164-048-11	CERAMIC	12PF	5%	50V		
C1028	1-124-242-00	ELECT	33MF	20%	25V		
C1029	1-124-282-00	ELECT	22MF	20%	16V		
C1030	1-124-478-11	ELECT	100MF	20%	25V		
C1031	1-102-963-00	CERAMIC	33PF	5%	50V		
C1034	1-124-282-00	ELECT	22MF	20%	16V		
C1036	1-124-282-00	ELECT	22MF	20%	16V		
C1037	1-124-282-00	ELECT	22MF	20%	16V		
C1039	1-124-478-11	ELECT	100MF	20%	25V		
C1047	1-124-465-00	ELECT	0.47MF	20%	50V		
C1048	1-126-301-11	ELECT	1MF	20%	50V		
C1049	1-124-598-11	ELECT	22MF	20%	25V		
C1051	1-124-465-00	ELECT	0.47MF	20%	50V		
C1055	1-124-589-11	ELECT	47MF	20%	16V		
C1056	1-124-499-11	ELECT	1MF	20%	50V		
C1057	1-124-768-11	ELECT	4.7MF	20%	50V		
C1059	1-124-499-11	ELECT	1MF	20%	50V		
C1060	1-124-499-11	ELECT	1MF	20%	50V		
C1061	1-124-499-11	ELECT	1MF	20%	50V		
C1062	1-102-129-00	CERAMIC	0.01MF	10%	50V		
C1063	1-124-768-11	ELECT	4.7MF	20%	50V		
C1066	1-126-101-11	ELECT	100MF	20%	16V		
C1070	1-126-103-11	ELECT	470MF	20%	16V		
<CONNECTOR>							
U12	1-573-300-21	CONNECTOR, BOARD TO BOARD 18P					
U13	1-573-300-21	CONNECTOR, BOARD TO BOARD 18P					
U16	*1-564-513-11	PLUG, CONNECTOR 10P					
U22	1-566-942-11	CONNECTOR, HINGE (RECEPTACLE) 30P					
U23	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)					
U32	*1-564-510-11	PLUG, CONNECTOR 7P					
U47	*1-564-506-11	PLUG, CONNECTOR 3P					
U50	*1-564-505-11	PLUG, CONNECTOR 2P					
<DIODE>							
D1005	8-719-110-36	DIODE RD13ESB2					
D1009	8-719-110-36	DIODE RD13ESB2					
D1010	8-719-110-36	DIODE RD13ESB2					
D1011	8-719-110-36	DIODE RD13ESB2					
D1012	8-719-110-36	DIODE RD13ESB2					
D1013	8-719-110-36	DIODE RD13ESB2					
D1014	8-719-110-36	DIODE RD13ESB2					
D1017	8-719-110-36	DIODE RD13ESB2					
D1018	8-719-110-36	DIODE RD13ESB2					
D1019	8-719-110-36	DIODE RD13ESB2					
D1020	8-719-109-66	DIODE RD3.3ESB2					
D1021	8-719-109-66	DIODE RD3.3ESB2					
D1022	8-719-109-66	DIODE RD3.3ESB2					
D1025	8-719-911-19	DIODE 1SS119					
D1026	8-719-911-19	DIODE 1SS119					
D1027	8-719-911-19	DIODE 1SS119					
<IC>							
IC1002	8-752-056-50	IC CXA1545S					
IC1011	8-759-145-57	IC UPC4557C					
<COIL>							
L1001	1-408-422-00	INDUCTOR			120UH		
L1002	1-408-422-00	INDUCTOR			120UH		
<TRANSISTOR>							
Q1009	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q1010	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q1016	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q1017	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q1018	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q1019	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q1020	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q1021	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q1022	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q1023	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q1025	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q1029	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q1030	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q1031	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q1032	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q1033	8-729-119-76	TRANSISTOR 2SA1175-HFE					
Q1034	8-729-119-76	TRANSISTOR 2SA1175-HFE					
<RESISTOR>							
R1011	1-249-435-11	CARBON	33K	5%	1/4W		
R1012	1-249-434-11	CARBON	27K	5%	1/4W		
R1013	1-249-417-11	CARBON	1K	5%	1/4W		
R1014	1-249-441-11	CARBON	100K	5%	1/4W		
R1015	1-215-437-00	METAL	4.7K	1%	1/4W		
R1016	1-249-441-11	CARBON	100K	5%	1/4W		
R1017	1-249-405-11	CARBON	100	5%	1/4W		
R1018	1-249-427-11	CARBON	6.8K	5%	1/4W		
R1019	1-249-427-11	CARBON	6.8K	5%	1/4W		
R1023	1-249-405-11	CARBON	100	5%	1/4W		
R1026	1-215-437-00	METAL	4.7K	1%	1/4W		
R1028	1-249-434-11	CARBON	27K	5%	1/4W		
R1029	1-249-435-11	CARBON	33K	5%	1/4W		
R1030	1-249-417-11	CARBON	1K	5%	1/4W		
R1032	1-249-417-11	CARBON	1K	5%	1/4W		
R1033	1-249-393-11	CARBON	10	5%	1/4W		
R1034	1-249-417-11	CARBON	1K	5%	1/4W		
R1036	1-249-440-11	CARBON	82K	5%	1/4W		
R1037	1-249-440-11	CARBON	82K	5%	1/4W		
R1038	1-249-440-11	CARBON	82K	5%	1/4W		
R1043	1-249-417-11	CARBON	1K	5%	1/4W		
R1046	1-249-413-11	CARBON	470	5%	1/4W		
R1048	1-249-405-11	CARBON	100	5%	1/4W		
R1050	1-249-405-11	CARBON	100	5%	1/4W		
R1051	1-249-417-11	CARBON	1K	5%	1/4W		
R1052	1-249-413-11	CARBON	470	5%	1/4W		

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UT S

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R1172	1-247-895-00	CARBON 470K 5% 1/4W		S45	*1-564-511-71	PLUG, CONNECTOR 8P	
R1173	1-247-804-11	CARBON 75 5% 1/4W		S46	*1-564-506-11	PLUG, CONNECTOR 3P	
R1174	1-247-895-00	CARBON 470K 5% 1/4W					
R1175	1-247-895-00	CARBON 470K 5% 1/4W		S47	*1-564-506-11	PLUG, CONNECTOR 3P	
R1176	1-247-804-11	CARBON 75 5% 1/4W					
R1177	1-247-804-11	CARBON 75 5% 1/4W				<DIODE>	
R1178	1-247-895-00	CARBON 470K 5% 1/4W					
R1179	1-247-895-00	CARBON 470K 5% 1/4W		D3444	8-719-404-46	DIODE MA110	
R1180	1-247-804-11	CARBON 75 5% 1/4W				<IC>	
R1181	1-247-804-11	CARBON 75 5% 1/4W					
R1182	1-247-804-11	CARBON 75 5% 1/4W		IC3401	8-759-403-44	IC MN1280-S	
R1183	1-247-895-00	CARBON 470K 5% 1/4W		IC3402	8-759-070-42	IC M37201M6-A18FP	
R1184	1-247-895-00	CARBON 470K 5% 1/4W		IC3441	8-759-708-05	IC NJM78L05A	
R1185	1-247-895-00	CARBON 470K 5% 1/4W		IC3442	8-759-084-12	IC LA7945	
R1186	1-247-895-00	CARBON 470K 5% 1/4W		IC3443	8-759-187-22	IC LC7458B-03	
R1187	1-247-804-11	CARBON 75 5% 1/4W		IC3444	8-759-403-44	IC MN1280-S	
R1188	1-247-804-11	CARBON 75 5% 1/4W				<COIL>	
R1191	1-215-437-00	METAL 4.7K 1% 1/4W		L3401	1-408-421-00	INDUCTOR 100UH	
R1192	1-215-437-00	METAL 4.7K 1% 1/4W		L3461	1-408-409-00	INDUCTOR 10UH	
R1193	1-215-437-00	METAL 4.7K 1% 1/4W		L3462	1-408-421-00	INDUCTOR 100UH	
R1194	1-215-437-00	METAL 4.7K 1% 1/4W				<TRANSISTOR>	
R1195	1-249-426-11	CARBON 5.6K 5% 1/4W		Q3441	8-729-422-27	TRANSISTOR 2SD601A-Q	
R1196	1-249-426-11	CARBON 5.6K 5% 1/4W		Q3444	8-729-903-10	TRANSISTOR FMW1	
		<SWITCH>				<RESISTOR>	
S1150	1-572-198-11	SWITCH, KEYBOARD					
*****							
	*A-1394-421-A	S BOARD, COMPLETE					
		*****					
		<CAPACITOR>					
C3403	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V		R3401	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
C3408	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V		R3402	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
C3409	1-124-589-11	ELECT 47MF 20% 16V		R3403	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
C3411	1-124-034-51	ELECT 33MF 20% 16V		R3404	1-216-033-00	METAL GLAZE 220 5% 1/10W	
C3442	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V		R3405	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
C3446	1-163-129-00	CERAMIC CHIP 330PF 5% 50V		R3406	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
C3447	1-163-117-00	CERAMIC CHIP 100PF 5% 50V		R3407	1-216-033-00	METAL GLAZE 220 5% 1/10W	
C3448	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V		R3408	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
C3449	1-164-182-11	CERAMIC CHIP 0.0033MF 10% 50V		R3409	1-216-033-00	METAL GLAZE 220 5% 1/10W	
C3451	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V		R3441	1-216-025-00	METAL GLAZE 100 5% 1/10W	
C3452	1-163-989-11	CERAMIC CHIP 0.033MF 10% 25V		R3442	1-216-041-00	METAL GLAZE 470 5% 1/10W	
C3453	1-124-589-11	ELECT 47MF 20% 16V		R3443	1-216-041-00	METAL GLAZE 470 5% 1/10W	
C3454	1-126-162-11	ELECT 3.3MF 20% 50V		R3444	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
C3455	1-126-163-11	ELECT 4.7MF 20% 16V		R3445	1-216-689-11	METAL GLAZE 39K 5% 1/10W	
C3456	1-163-129-00	CERAMIC CHIP 330PF 5% 50V		R3446	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
C3457	1-163-117-00	CERAMIC CHIP 100PF 5% 50V		R3449	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
C3459	1-124-589-11	ELECT 47MF 20% 16V		R3450	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
C3460	1-163-099-00	CERAMIC CHIP 18PF 5% 50V		R3451	1-216-093-00	METAL GLAZE 68K 5% 1/10W	
C3461	1-163-099-00	CERAMIC CHIP 18PF 5% 50V		R3452	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
C3507	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V		R3453	1-216-679-11	METAL CHIP 15K 0.50% 1/10W	
C3508	1-164-005-11	CERAMIC CHIP 0.47MF 25V		R3454	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
C3509	1-163-139-00	CERAMIC CHIP 820PF 5% 50V		R3455	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
C3515	1-163-121-00	CERAMIC CHIP 150PF 5% 50V		R3456	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
C3540	1-126-157-11	ELECT 10MF 20% 16V		R3463	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
		<CONNECTOR>		R3464	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
S42	*1-565-514-11	SOCKET, CONNECTOR 2P		R3465	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
S42	*1-568-378-21	PIN, CONNECTOR 3P		R3472	1-216-091-00	METAL GLAZE 56K 5% 1/10W	
S43	*1-564-508-11	PLUG, CONNECTOR 5P		R3473	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				R3474	1-216-295-00	METAL GLAZE 0 5% 1/10W	
				R3504	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
				R3509	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
				R3511	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				R3512	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié

**KV-27XBR96S/32XBR96S**  
RM-Y114A

**S**

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R3513	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W		4-037-305-01		BRACKET (R), SPEAKER (KV-27XBR96S(U/C))	
R3514	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W		*4-037-680-01		CUSHION (LOWER) (ASSY) (KV-27XBR96S(U/C))	
R3519	1-216-049-00	METAL GLAZE 1K 5% 1/10W		*4-037-681-01		CUSHION (UPPER) (ASSY) (KV-27XBR96S(U/C))	
R3520	1-216-049-00	METAL GLAZE 1K 5% 1/10W		*4-037-684-01		INDIVIDUAL CARTON (KV-27XBR96S(U/C))	
R3521	1-216-049-00	METAL GLAZE 1K 5% 1/10W		*4-384-027-01		BAG, PROTECTION (KV-27XBR96S(U/C))	
R3525	1-216-295-00	METAL GLAZE 0 5% 1/10W		9-910-999-32		BAG, POLYETHYLENE	
R3526	1-216-073-00	METAL GLAZE 10K 5% 1/10W					
R3528	1-216-295-00	METAL GLAZE 0 5% 1/10W				REMOTE COMMANDER	
R3529	1-216-295-00	METAL GLAZE 0 5% 1/10W					
R3530	1-216-073-00	METAL GLAZE 10K 5% 1/10W		1-693-156-21		REMOTE COMMANDER (RM-Y114A)	
R3531	1-216-073-00	METAL GLAZE 10K 5% 1/10W		9-902-623-01		COVER, BATTERY (FOR RM-Y114A)	
R3532	1-216-073-00	METAL GLAZE 10K 5% 1/10W		9-902-624-01		COVER (FOR RM-Y114A)	
R3535	1-216-033-00	METAL GLAZE 220 5% 1/10W					
R3537	1-216-295-00	METAL GLAZE 0 5% 1/10W					
R3540	1-216-073-00	METAL GLAZE 10K 5% 1/10W					

<CRYSTAL>

X3401 1-577-358-21 VIBRATOR, CERAMIC  
X3441 1-577-364-11 VIBRATOR, CERAMIC

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MISCELLANEOUS  
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$\Delta$  1-406-586-11 COIL, DEMAGNETIZATION (KV-32XBR96S(U/C))  
 $\Delta$  1-406-587-11 COIL, DEMAGNETIZATION (KV-32XBR96S(U/C))  
 $\Delta$  1-406-588-11 COIL, DEMAGNETIZATION (KV-27XBR96S(U/C))  
 $\Delta$  1-406-589-11 COIL, DEMAGNETIZATION (KV-27XBR96S(U/C))  
 $\Delta$  1-417-178-11 SELECTOR, ANTENNA (AS-2)

$\Delta$  1-451-393-11 DEFLECTION YOKE (Y34EXA) (KV-32XBR96S(U/C))  
 $\Delta$  1-451-394-11 DEFLECTION YOKE (Y29EXA) (KV-27XBR96S(U/C))  
 $\Delta$  1-452-616-13 NECK ASSY, PICTURE TUBE (NA323)

\*1-555-400-00 CABLE, PIN  
\*1-557-056-31 CABLE, P-P  
 $\Delta$  1-696-002-12 CORD, POWER(WITH NOISE FILTER) 7A/125V  
V901  $\Delta$  8-733-731-05 PICTURE TUBE (M81KVA10X) (KV-32XBR96S(U/C))  
V901  $\Delta$  8-733-837-05 PICTURE TUBE (M68KU210X) (KV-27XBR96S(U/C))

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ACCESSORIES AND PACKING MATERIALS  
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X-4031-013-1 SCREW ASSY, ORNAMENTAL  
1-504-181-11 SPEAKER SYSTEM (13CM)  
1-504-182-11 SPEAKER SYSTEM (13CM)  
1-559-238-11 CORD, SPEAKER CONNECTION  
3-757-188-21 MANUAL, INSTRUCTION (ENGLISH)  
  
3-757-188-31 MANUAL, INSTRUCTION (FRANCH) (KV-27XBR96S(C), KV-32XBR96S(C))  
3-757-188-41 MANUAL, INSTRUCTION (SPANISH) (KV-27XBR96S(U), KV-32XBR96S(U))  
\*4-041-259-01 BAG, PROTECTION (KV-32XBR96S(U/C))  
  
4-036-347-01 BOX, SPEAKER (KV-32XBR96S(U/C))  
\*4-036-702-01 PLATE, TOP (KV-32XBR96S(U/C))  
\*4-036-704-01 CUSHION (UPPER) (ASSY) (KV-32XBR96S(U/C))  
\*4-036-706-01 CUSHION (LOWER) (ASSY) (KV-32XBR96S(U/C))  
\*4-036-711-01 INDIVIDUAL CARTON (KV-32XBR96S(U/C))  
  
4-036-807-01 BRACKET (L); SPEAKER (KV-32XBR96S(U/C))  
4-036-808-01 BRACKET (R), SPEAKER (KV-32XBR96S(U/C))  
4-036-809-01 CUSHION, RUBBER  
4-037-304-01 BRACKET (L), SPEAKER (KV-27XBR96S(U/C))

